

**“A STUDY TO ASSESS THE STRESS AND COPING
STRATEGIES OF MOTHERS OF CHILDREN
UNDERGOING HEMODIALYSIS IN A SELECTED
HOSPITAL, CHENNAI”.**

By

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(Affiliated to the Tamilnadu Dr.M.G.R Medical university)

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TAMILNADU

APRIL 2011

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CERTIFICATE

This is to certify that this thesis titled “A STUDY TO ASSESS THE STRESS AND COPING STRATEGIES OF MOTHERS OF CHILDREN UNDERGOING HEMODIALYSIS IN A SELECTED HOSPITALS, CHENNAI.” Submitted by Ms.B.Padmini, Msc,Nursing (2009-2011 batch) Vivekanandha College of Nursing in partial fulfillment of the requirement of the Degree of Master Science (Nursing) from the Tamilnadu Dr.M.G.R. Medical University,Chennai in their originalwork carried out under our guidance.

This thesis or any part of it has been previously submitted for any other Degree or Diploma.

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DECLARATION

I hereby declare that this thesis entitled “**A STUDY TO ASSESS THE STRESS AND COPING STRATEGIES OF MOTHERS OF CHILDREN UNDERGOING HEMODIALYSIS IN A SELECTED HOSPITAL, CHENNAI**” is the outcome of the original research work undertaken and carried out by me under the guidance and Direct supervision of **Prof.(Mrs).R.KANAGAVALLI.M.Sc.(N).Ph.D.,** and speciality guide **Prof.(Mrs). L.PARIMALADEVI. M.Sc.(N).** Department of Child health nursing, Vivekanandha College of Nursing (Sponsored by Angammal Educational Trust), Elayampalayam, Tiruchengode, Namakkal District.

I also declare that this thesis has not formed the basis for the award of any Degree/ Diploma/ Associateship/ Fellowship or similar title to any candidate of any university.

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ABSTRACT

The thesis titled **“A STUDY TO ASSESS THE STRESS AND COPING STRATEGIES OF MOTHERS OF CHILDREN UNDERGOING HEMODIALYSIS IN A SELECTED HOSPITAL, CHENNAI.”** Was Conducted by Ms.B.Padmini, in partial fulfillment of the requirement for the degree of Master of Nursing in Vivekanandha College of Nursing during the year (2009-2011 batch).

THE OBJECTIVES OF THE STUDY

1. To assess the knowledge of mothers on renal failure.
2. To assess the stress experience by mothers if children undergoing hemodialysis.
3. To identify the coping strategies of mothers of children undergoing hemodialysis.
4. To compare the stress and coping strategies of mothers of children undergoing hemodialysis.
5. To determines the stress and coping strategies with selected demographic characteristic like age, education, occupation, religion, family income, types of family.

The conceptual frame work adopted for the study was modified from of Roy's adaptation Health City model .The research approach adopted for the study was descriptive in nature,40 mothers were selected by convenient sampling in Global hospital, Chennai and the data was collected by structured stress scale coping scale. section –c deals with the stress of mothers of hemodialysis children, section-D deals with the coping strategies of mothers of hemodialysis children

The reliability of the tool was $r=0.98$. content validity of the tool was obtained from 5 experts. Final study was conducted in the month of June 2010. The collected data was analyzed by descriptive and inferential statistics in terms of mean, mean score percentage, standard deviation percentage and chi-square analysis.

MAJOR FINDINGS OF THE STUDY

FINDINGS RELATED TO SOCIO DEMOGRAPHIC VARIABLE

Out of 40 mothers 4 7.5% are from the age group of 31-35years, 37.5% are from the age group of 21-25 years, majority of subjects 40% are illiterate, 27.5% of mothers have primary education,65% respondents are Hindus,25% of them are Christians, Most of the mothers 77.5% are home makers and 17.5% are professionals. Monthly income in the most of the families 47.5% is Rs .above Rs.4000/- and 72.5% mothers are in rural area, 65% of mothers are in nuclear family.

Among the children studies, 40% are from 12-14 years, 77.5% are males children.55% children are in 2nd birth order. 87.5% represents are full term baby, 75% children are in 2.6-3 kg, 90% are fully immunized.77.5% are not having birth defect,65% are in above 5 years, 70% of children having frequency of dialysis above 5 yrs, 87.5% children having previous history of hospitalization and 57.5% are having family history.

The mean score percentage of stress faced by the mothers of children undergoing hemodialysis is 76.32% and the mean score percentage of the coping strategies adapted by the mothers children undergoing hemodialysis is 61.7% .

Chi-square analysis shows that there is no significant relationship between socio demographic variable such as age of the mother,education,occupation,family income,residence and there is a significant relationship with type of the family of stress faced by the mothers of children undergoing hemodialysis and significant relationship between coping variable such as occupation, residence and there is no significant relationship with the age, education,family income,type of family.

Based on these findings the following recommendations were

- Similar study can be replicated in nursing with large sample in other hemodialysis unit.
- A study can be conducted to find out the attitude of family members towards hemodialysis.
- Experimental study can be conducted with standard teaching programme on knowledge of renal failure for mothers of hemodialysis children.
- A comparative study can be conducted to find out similarities and difference in the stress and coping strategies of illiterate mothers of hemodialysis children.
- A comparative study can be conducted to find out similarities and difference in the level of stress, and coping strategies of rural and urban mothers of hemodialysis children.
- A comparative study can be done in assessing the stress level and coping strategies among working and non working mothers of hemodialysis children.
- A comparative study on stress and coping strategies of parents having hemodialysis children with other chronic conditions such as mentally retarded and cerebral palsy.
- A study can be undertaken to evaluate the role of health care providers in communicating with the parents having hemodialysis children.

SUMMARY

This chapter deals with summary, major findings, conclusion, Implication and recommendation.

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CHAPTER-I

INTRODUCTION

“A Child is precious and Beautiful,
A Source of joy and Happiness,
A Faces of love and care ,
A subject of dreams for the future”.

[Child care 1996]

Children are inheritance from god. They are like clay in pottar's hand. Handled with love and care they become something beautiful or else they become break of discarded. Nation's future is in their hands. If there health is affected in childhood he wants' to be healthy in future. Children are most vulnerable group in the society. Certain disease affects them and result in increased mortality and morbidity

SAMSON(1980) says, today children are tomorrow citizens and leader. The resource spent on the care, unkeep and health of young are in investment for the future.

Renal failure is the inability of the kidneys to excrete waste material, concentrate urine and conserve electrolytes. It can be in acute renal failure Acute renal failure is suddenly kidney are unable to regulate the volume and composition of urine appropriately in response to food and fluid intake and the needs of the

organism. The causes of acute renal failure are prerenal, intrinsic and postrenal causes.

The prerenal causes are acute gastroenteritis, hemorrhagic shock. Intrinsic causes are acute tubular necrosis, glomerulonephritis. The postrenal causes are calculus, posterior urethral valves

The clinical manifestation of acute renal failure are oliguric, anuria and other non specific are nausea vomiting, drowsiness, edema. A careful history is taken to reveal symptoms that may be related to glomerulonephritis, obstructive uropathy. Significant laboratory measurements during shutdown that serves as a guide for therapy is BUN, serum creatinine, PH, serum potassium and calcium.

The management includes a) treatment of underlying causes, management of complication of renal failure

b) Provision of supportive therapy

The important management of the acute renal failure is,

1. Maintain the fluid balance
2. Maintain the electrolyte balance
3. Low sodium and potassium diet
4. Dialysis

The complication of acute renal failure is, Hyperkalemia, Hypertension, Anemia, Seizures, Cardiac failure.

The resource spent on the care, keep healthy of young investment for the future. Chronic renal failure signifies irreversible and progressively loss of renal function evenly resulting in the end stage renal diseases(ESRD) it is characterized by a glomerular filtration rate fallow below 5% of normal[5-10ml/min/1.73m²] renal replacement such as dialysis and renal transplantation become necessary for survival.

The incidence of chronic renal failure in the paediatric population is approximately 18 per 1 million. The variety of disease and disorder can result in chronic renal failure. Point prevalence counts listed 283,932 people of ages with ESRD on Medicare ,with children up to 19 yrs of age representing 1.8% of the total (USRDS,1998)

The most frequent causes are congenital renal and urinary tract malformation ,vesicoureteral reflux associated with recurrent UTI ,chronic pyelonephritis, hereditary disease, chronic glomerulonephritis glomerulonephropathy associated with systemic disease such as anaphylactic purpura. The signs and symptoms of chronic renal failure are fatigue, pallor, facial edema, weight loss, bone or joint pain, bruised skin and unpleasant 'uremic' breath odor.

Growth failure is more prominent in chronic renal failure children. The factors associated with growth retardation include Under nutrition osteodystrophy, hormonal abnormalities and metabolic acidosis.

Renal osteodystrophy is common in chronic renal failure children is associated with hyperphosphatemia, high serum alkaline phosphates level, and low level of 1,25-dihydroxy vitamin D. Anemia results from failure of a kidney to produce adequate erythropoietin.

The blood investigation reveals electrolyte abnormalities, calcium and the phosphorus abnormalities or anemia. Rising creatinine and blood urea nitrogen (BUN) level suggest the ESRD. Bone radiographs diagnose renal osteodystrophy. There are useful detect the chronic renal failure.

The management include medical management, dietary management and renal transplantation. The diet management, the might include the following restrictions; salt and fluid to prevent fluid over load and hypertension, protein because of kidney inability to remove waste products, phosphorus restriction to help to prevent the bone disease and potassium because of kidneys inability to remove it.

The renal transplantation therapy dialysis is necessary for survival of chronic renal failure children. In hemodialysis is used often or older and larger children. When intravascular access is less of an issue. Vascular access is not easy in small children who are having weight less than 20 kg. Vascular access may be one of the three types, 1. Fistula 2. Grafts 3. External vascular access devices

Hemodialysis is best suited to who do not have someone in the family, who is unable to perform home peritoneal dialysis and those who live close to the

dialysis centre. The procedure is usually performed 3 times /week for 4-6 hrs, depending on the child's size. Maintenance dialysis is effective for a child who is awaiting renal transplantation or in whom renal transplantation is not possible

The childhood dialysis treatment affect the entire family, it affect mainly the mother. Because they are the one completely fulfilling the need of their child. Mothers of children with hemodialysis are more prone to be emotionally affect and developed stress. Stress leads the mothers to discomfort in the family.

“Chronic stressor would include a sense of helplessness and psychological distress” (**SHELDON COHEN,1997**) “Remember stress can add spice to your life if you handle it right”

Stress presents a paradox it is necessary to life, yet it can be harmful. **KENNY (1986)**

The agent or event either internal or normal that cause stress and disturbs the equilibrium of an individual is called stressor. Research have investigated the effect of multiple stressors and they Have found that the potential for harm increase with the number of stressors acting on the person.

Researcher Have demonstrated the stressors are uncontrollable negative and work the background for the family. Every one experience stress and accompanying of anxiety. When a person adaptive attempts are unsuccessful, illness occur. A person who is ill has few Adaptive resource available to cope with stressors.

Stress in human life is often adequate with tension, anxiety, worry and pressure. It is accepted fact the stress is necessary for life and who is ill has few Adaptive resource available to cope with stressors.

Stress in human life is often adequate with tension, anxiety, worry and pressure. It is accepted fact the stress is necessary for life and you need to recognize in your own life. The signs and symptoms of stress, it also helps to be knower about stress management techniques to aid personal coping in you as well as with patient and their families.

Noted the prolonged state of stress cause disease stress makes people ill as a result of increased level of powerful hormones that changes bodily process. Stress include work stress, family stress, acute stress, daily trauma and crisis. work and family stress interest family being the back ground of work ambiguous are more stressful can be predicted modified or terminated. **SHELLEY (1999)** Stress was a condition the body situation was distributed because of psychological pressure. **FRIK AKUMULUDIN (2000)**

Stress a particular relationship between the person and the environment that is appraised by the person as taxing and exceeding the person resource and endangering well being. **LAZARUS AND FOLKMAN (1984)**

The stress will be reduced by using of proper and suitable coping strategies or mechanisms. coping is an essential component of the border concept of adaptation .The process of coping is directed towards the generation of purposeful

action. coping can be considered acquisitioned in nature. Because it assumes that one can learn to cope more effectively.

Coping is the process through which the individual manages the demands of the person environment relationship that are appraised as stressful and emotions .Coping is the process of managing toxins circumstances extending efforts to solve personal and interpersonal problems and seeking to minimize .

The psychological outcome of stress process is generally adaptation or adjustment. Coping effort include several behavioral and cognitive strategies there focused into two categories

1. problem focused or primary strategies
2. Emotional focused or secondary control strategies

A particular coping strategies is not good or bad in general. A strategy may be beneficial on the occasion ,but in effective or even harmful in another context [LAZARUS,1999] The form coping is used interchangeable to mean either “the ways of mother try to handle stress” or “how they anger”

Mothers are usually the primary care provider to children. Psychological problem faced by mothers of children with any sort of illness, especially the chronic illness ESRD and treatment of hemodialysis is evident.

The mother find themselves trying to cope up with new problems and emotions concerning the ill child, siblings, marriage , altered schedule and financial concerning.

NEED FOR THE STUDY:

**“OF ALL GREATEST THINGS THE LOVELIEST AND MOST DIVINE
ARE CHILDREN”**

-WILLIAM CANTON

Kidney function is essential in dealing with the waste material in our body. In childhood renal failure, the acute renal failure accounts for 2-5% admission to general paediatric wards across the world (**OP GHAI,2010**) Point prevalence counts listed 283,932 people all ages with end stage renal disease on Medicare, with children up to 19 yrs of age representing 1,8% of the total(**USRDS,1998**)

The child with renal failure requires renal replacement in the form of either dialysis on a continuing basis or a renal transplantation. Both are expensive option that require recurrent expenditure over the child's life time.

More and more 21st century health problem have been linked with the effects of stress. It is estimated that many health complaints are stress related. Stress is a universal experience and a component in all over lives. The most frequently reported stressful events were changes in eye sight, loneliness, depression and dependence on others.

“To stand still with stressful event is to lose to move towards coping is to gain to change the life remaining life is lead y”(Health action 2006) describes stress is the relationship between the person and the environment that is appraised

by the person as taxing or exceeding his or her resources endangering his or her well being. **Sit Raju(2004)**

Stress results from changes in the internal and external environments which disrupt the functioning of the organism. **(SKEAT 1958)** Stress is produced by changes in the environment that is perceived as a challenge , a threat or a danger. **(TAYLOR et al2000)**

Measure the stress by coping, one to assess the stimuli, the individual response to stimuli or the integration of the person with stressful stimuli. Since it focus on the cognition and perceptual characteristic of the individual that mediate response to stress. **Jenkins et al (1997)**

Most of the nurses give importance to the physiological needs but they less focus on the physiological needs of the child and there mothers in their stress situations.

Stress can have physical, emotional, intellectual, social and spiritual consequences. Usually the effects are mixed because stress affects the whole person. Physically stress can threaten a person physiological homeostasis. Emotionally stress can produce negative [or] Non constructive feeling about self. Intellectually, stress can alter a person's perceptual or problem solving abilities. Socially stress can affect a person's relationship with others. Spiritually stress can change a person general outlook life.

As the patient “ Bill of rights“ and consumers right in health case, the patient or the parent in case of children with chronic illness has the right to be informed about his/her own diagnosis and specific treatment program including cost if the treatment, medications, duration if treatment, options, effects and side effects. It can reduce the stress level of the child’s parents. **[KONICR,B AND ERB, 1983]**

One of the most important responsibility of the nurses is to, identify the stressful mothers and teach the coping strategies. This helps in relieving mother’s emotional stress regarding their child. The mother of children with hemodialysis stress level is important because it allow them to support the children in a better manner.

Nursing today is graded towards the holistic approach where all aspects of care such as physical, emotional, social and spiritual are included. Nurses in the 21st century are coming up with idea of extended role. While working with the children she has to play many roles, in which the effective one is that, a psychologist.

A nurses providing psychological support to children and their mother during their emotional situation, is a greater relief for them. Nurses are strategic position to assume a vital role. Helping the mother is essential when diagnosis is made. It is not enough to give an explanation on just one occasion. Psychological healing takes place, if the nurses work though the feelings.

Assessment of stress is one way to reduce the anxiety about the condition and improve the psychological status of the mother of children undergoing hemodialysis and providing better care by the mother to the children undergoing hemodialysis.

Coping behaviors can be used by the mother to solve a problem or handle a stressful situation. The most productive way to tackle this problem is to motivate the mother of children undergoing hemodialysis on providing supportive care to improve the survival rates.

Investigator during her clinical experience in dialysis unit , found that the mothers with children of hemodialysis ,had less knowledge on renal failure and mothers experienced more stress, Whenever their children had undergone dialysis, so the investigator had taken up the study ”To assess the stress and coping strategies of mothers of children undergoing hemodialysis in a selected hospitals.”

STATEMENT OF THE PROBLEM:

A study to assess the stress and coping strategies of mothers of children undergoing hemodialysis in a selected hospital.

OBJECTIVES:

1. To assess the knowledge of mother of children undergoing hemodialysis.
2. To assess the stress experience by mother if children undergoing hemodialysis.

3. To identify the coping strategies adapted by mothers of children's undergoing hemodialysis
4. To compare the stress and coping strategies of mother of children with hemodialysis
5. To determine the stress and coping strategies with selected demographic characteristics like age of the mothers, education, religion, occupation, family income, residence, types of the family adapted by mother of children with hemodialysis

ASSUMPTION:

1. The mothers may have in adequate knowledge on renal failure.
2. The stress is experienced by the mother of children undergoing hemodialysis.
3. The mother may adapt certain coping strategies for those problems.
4. The level of stress and coping strategies may vary depending upon the demographic variable like age, education, occupation, religion, income, types of family.

OPERATIONAL DEFINITIONS:

Hemodialysis:

Hemodialysis involves shunting the patient blood from the body through a machine in which diffusion and ultra filtration occur and then back into the patient's circulation

Stress:

Stress is a state of disequilibrium found in the internal and external environment of an individual and that disrupts the normal functioning.

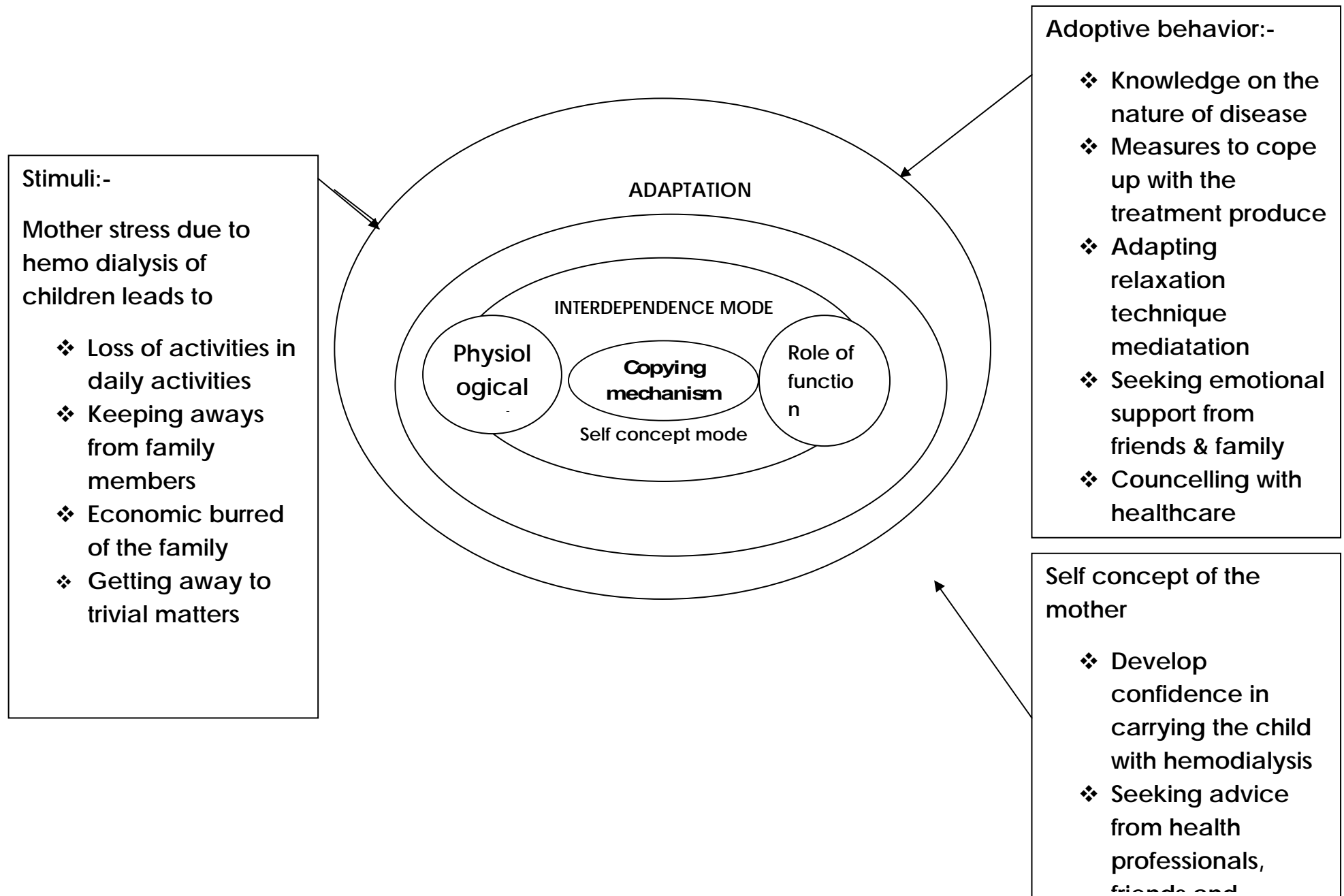
Coping strategies:

It refers to those techniques which are adapted by the mother to overcome the problem to their children with hemodialysis.

LIMITATIONS :

1. The study is limited to mothers of hemodialysis children in a selected hospital.
2. The study is limited to mothers of hemodialysis children Age group (6-18 years).
3. The sample size is 40.
4. The mothers who are willing to participate in the study

CONCEPTUAL MODEL MODIFIED FROM ROY'S ADAPTATION MODEL



Concept framework:

A conceptual frame work is a group of concepts and set of preposition that spells out the relationship between them. The overall purpose to make scientific finding more meaningful and generalisable.

This model is designed by sister callinta Roy in 1970. Roy adopted the framework by keeping hellson's adaptation theory as a foundation. Roy developed the model as frame work for nursing province, research and education.

The Roy's adaptation models focus on the response of the adaptive system to constantly changing environment. Adaptation is the central feature and a core concept of the mode. Problem in adaptation rise when the adaptation system is unable to cope with or response to constantly changing stimuli from the internal and external environment in a manner that maintain the integrity of the system.

The persons are identified as an adaptive system. System is defined as a set of parent's to function as a whole for some purpose and is does so by virtue of the interdependent of its parts.

Adaptive means that the human system has the capacity to adjust effectively to changes in the environment and is turn affects the environment (Andrews and Roy 1991).

The adaptive system has two major internal control processes, called the regulator and cognator subsystems. The regulator subsystem responds auto medically through neural, chemical and endocrine coping process. The cognator

subsystem responds to inputs from external and internal stimuli that involve psychological, social, physical and physiological factors with aging the coagulator and cognator activity is deroinished and hence more ineffective response.

Physiological mode:

This is associated with the way the person responds as a physical being to stimuli from the environment. Behaviors in this mode is the manifestation of the physiological activities of all cells, tissue organs and system comprising the human body. Here the stimuli is physiological mode for the mother that is the stress of the mother with mother due to chronic illness of the child leads to, loss of interest in daily activities keeping away from the family members economic burden of the family and getting angry to trivial matter.

Self-concept mode:

Self concept mode compasses perception of the physical self and the personal self. It focus on the need of psychic integrity that is need to know who one is, so that can be or exist with a sense of unity. In this study the mother develops confidence in caring the child with hemodialysis treatment and seeking advice from health professionals, friends and family members

Role function mode:

This emphasizes the need of social integrity that is “the need to know integrity that is the need to know who all is in relation to others so that can alter”

that is behavior based person position in society. According to the role function mode of mother maintains most relationship with family members and others

Interdependence mode:

This also emphasizes the need for social integrity. Interdependence is way of maintaining integrity that involve the willingness and the ability to love and accept love and respect given by others.

This interdependence mode if the mother develops that ability to accept the child hemodialysis treatment with the support of the family members.

REVIEW LITERATURE

The literature review is considered essential to all steps of research process, the task, identification selection, critical analysis and written description of existing information on the topic of interest from this perspective the review is broad, systematic and critical collection and evaluation of the important published scholarly reading the literature is to develop a sound study that contribute to further the knowledge development of theory, research, education and practice.

A Through literature review, provides a foundation upon which to base new knowledge and generally is conducted well before any data are collected in study. **(POLIT AND HUNGLER)** for the present study the related literature was reviewed and organized in the following manner

- Literature related to hemodialysis children
- Literature related to stress of mothers of children undergoing hemodialysis treatment.
- Literature related to coping strategies of mothers of children undergoing hemodialysis treatment.

LITERATURE RELATED TO HEMODIALYSIS:

Hemodialysis cleanses the body by circulating it through a special filter called as an artificial kidney. Blood is pumped through the artificial kidney and returned to the body (**SUSAN ROWEN JAMES, 2009**)

Hemodialysis is more efficient than peritoneal dialysis but requires close monitoring for symptoms related to rapid changes in fluid and electrolyte balance. It is a week, with each treatment lasting approximately 3 to 4 hrs. (**JANE BALL et al**)

Hemodialysis is used more for older and larger children, when the vascular access is less of an issue (**NELSON, 2009**) in infants and small children, hemodialysis is technically more difficult and fluid and electrolyte shifts are more pronounced. (**SUSAN ROWEN JAMES 2009**)

Hemodialysis requires the creation of vascular access and use of special dialysis equipment the hemodialysis or so called artificial kidney (**WONGS, 2009**)

To initiate hemodialysis, vascular access is created, vascular access describes the method by an arteriovenous connection is made. For transport of blood to the dialysis apparatus, arteriovenous fistula or polytetrafluoroethylene (PTFE) grafts are used for vascular access for prolonged treatment. More recently, specially catheters for hemodialysis have been in the femoral, subclavian and jugular vein. (**DOROTHY RMARLOW et al, 1998**)

Paediatric hemodialysis subdivided into 2 groups

1. Single indwelling venous line

Arteriovenous (A.V)

Hemodialysis access option

Indwelling venous

Artriovenous

Temporary

Long term

External

Internal

(FORFAIR et all)

For paediatric dialysis, the blood component should be as small as possible and compliance should be minimal. During dialysis, the dialyzer and bloodline should not exceed 10% of the patient blood volume. Children are usually dialyzed with a paralalled place or hollow fiber dialyzer. The main consider action in component volume paediatric dialyzer of 0.25,0.5,0.6,1.0 and1.3 to 1.6m² are suitable for children less than 10,and 20 to 40 and more than 40 kg respectively.

Blood flow= $2.5 \times \text{body weight (kg)} + 100$ for children 10—40 kg

The dialysis flow should be at least 1.5 times the blood flow rate.

(ABDELAZIZ et all)

The arteriovenous fistula is difficult to insert in smaller children (less than 20 kg) it has the advantages of allowing more freedom but the disadvantages of requiring needle insertion at each dialysis (**EUGENIA H.WAECHTER et all**)

Hemodialysis can be performed on an intermittent time cycled basis. Either in hospital, dialysis center or home setting. (**NICKI L.POTTS et all**) during hemodialysis session blood through an extracorporeal circuit that included a hallow fiber dialyzer anticoagulation of the circuit is achieved by systemic heparinization. The procedure requires high degree of technical expertise and need for continuous monitoring. (**OP GHAI et all**)

Hemodialysis frees the parents from the need to perform daily dialysis. this require time away from school and other activities for the child and from work and other family responsibility for the parents since hemodialysis is usually performed only every other day. Larger amount of waste products build up in the child's blood (uremia) placing the child at risk for seizures. The access site may become infected and occlusion is also possible (**TERRI KYLE, 2009**)

One third of vascular access initially fail, with 85% due to thrombosis and the remaining 15% from infection. (**BOOG, 1998**) Infants and small children are hemodynamic ally more fragile and respond more quickiy to sodium and fluid depletion or excess associated with dialysis procedures (**TAYLOR, 1994**)

Very stable older children might be considered, on an individual basis, for home hemodialysis, hemodialysis procedure and access care can be threatening to

both the child and family therefore family should be given as much information as they can handle and time should be taken to give them basic explanations and their co operation with procedure. (GILMAN AND FRAUMAN 1998, TAYLOR 1996)

In haemodialysis potassium phosphorus generally govern the dietary prescription. phosphorus restriction daily products and most children are expected to drink milk fluid restriction depends on the child's urinary output volume and is calculated by intake volume allowed being equal to output plus 500 to 600 ml (PATRICIA LUDDER JACKSON et al 2000)

Growth rate and skeletal maturation improve, but recovery of normal growth is infrequent in many cases sexual development, although delayed progress to complication.

STUDIES RELATED TO HEMODIALYSIS CHILDREN:

BRIONES L, et al (2010) conducted a study on "Permanent vascular access survival in children on long term chronic hemodialysis" in department of nephrology, hemodialysis unit, hospital de paediatric prof JP Garrahan, Argentina. The aim of the study is report a single-centre experience regarding the management and outcome of permanent vascular access in children on chronic hemodialysis we analyzed the survival of permanent vascular access in 79 paediatric patients with on chronic HD . The creation of AVF was significantly more frequent in children weighing >25 kg and in 1- year primary patency rate

was 50% for arteriovenous fistula and 30% for arteriovenous graft. Our study demonstrated better results of arteriovenous fistula and arteriovenous graft.

DAUGIRDAS JT et al (2010) conducted a study on "Dose of hemodialysis based on body surface area is markedly less in younger children than in older adolescent in university of Illinois at Chicago, in 34 children (11 girls, 23 boys) dialysed 3 times a week age range 1.4 to 18 yrs the mean delivered equilibrated was 1.40, and the mean was 2.49. strongly correlated with age between ages 2 and 2.45. if surface area based denominator were to be adopted for hemodialysis dosing most children under 10 yrs_ of age would receive markedly less hemodialysis than adolescent patients and would require 6 to 8 hour hemodialysis sessions for the youngest children, treatment given more frequently than 3 times a week.

KIM AC, et al (2010) conducted a study on "Two stage basilica vein transposition a new approach for paediatric hemodialysis access in paediatric surgery, university of Michigan medical school USA, 42 arteriovenous access procedures were performed 15(36%) 2 stage basilica vein transposition, 13(31%) 1-stage basilica vein transposition, 6(14%) radiocephalic, 3(7%) brachiocephalic, 1(2%) brachioabachial, and 4(10%) arteriovenous graft. rates of fistula maturation, use and patency are higher for 2 stage basilica vein transposition with lower rates of failure.

BROWNBRIDGE G, et al (2006) conducted a study on "Psychosocial adjustment and adherence to dialysis treatment regimens_ "in department of

paediatrics st James university Hospital, UK, 60 children and adolescent in end stage renal failure undergoing hemodialysis at one of five united kingdom dialysis centre were assessed on psychosocial adjustment and adherence to their fluid intake, diet and medication regimens. Parental adjustment was also measured and data on sociodemographic and treatment history variable collected. Correlational analysis showed that low treatment adherence was associated with poor adherence then young children $P(<0.001)$ duration of dialysis ($P < 0.05$) low family socioeconomic status and family structure these findings demonstrate the importance of psychosocial care in the treatment this group of child.

VHZQUEZI, et al (2003) conducted a study on “ psychological factors and quality of life in young haemodialysis patient with low comorbidity in department of clinical psychology and psycho biology Spain 117 patients from 43 Spanish haemodialysis centers participated in the study. Patients completed the kidney disease quality of life short form recorded haemodialysis patients showed a profile similar to that of general haemodialysis population with low health score but normal mental health.

ANNA J (1998) conducted a study on “stress inoculation education counseling with children on haemodialysis” in department of psychology, USA. a single subject experimental design with multiple repeated measures was used to investigate the effects of cognitive behavior intervention of stress inoculation education and counseling on anxiety, depression, psychosocial adjustment to illness, and perception of haemodialysis stressors. To intervention variables, inter

personal support and control were assessed to determine their influence in the dependent variable. Stress inoculation education and counseling were effective in decreasing some problem for all study patients.

BOCHETASKA, et al(1992) conducted a study “psychological aspects on treatments of children with terminal renal failure by repeated haemodialysis” in clinical nephrology, adaptation difficulties of adolescent during treatment with repeated dialysis are discussed emotional status or studied in five search cases, in all of long standing mood depression was found, the necessity of systematic psychotherapeutic care in such cases is stressed.

SANDER V, et al (1989) conducted a study on “school and in-center paediatric haemodialysis patient” life on machine can significantly disrupt the social and academic school experience of preadolescent and adolescent renal failure patient because of their frequent absence. Haemodialysis patient were offered treatment after school and social integration and academic performance.

FARMER CJ, et al (1989) conducted a study on “survival on home haemodialysis its relationship with physical symptomatology, psychosocial background and psychiatric morbidity” home haemodialysis patient from one hospital in the unit was assessed for psychiatric morbidity. A rating of physical in that 71 chronic renal disease children and their parents in a cross sectional study(33 transplanted, 11 peritoneal dialysis, 5 hemodialysis, 22 conservative treatment) we used specific quality of life test for chronic renal disease children.

Children on hemodialysis refer a worse physical activity and school attended especially those hemodialysis.

JEFFEREY FADROWSK , et al(1989)“Patterns of Use of Vascular Catheters for Hemodialysis in Children” in department of nephrology,USA , 1,284 prevalent pediatric CPM patients examined, 529 (41%) had an AVF/AVG and 755 (59%) had a vascular catheter. Of 755 children with a catheter, “small body size” was a commonly listed reason (N = 142); 49% of these children weighed 20 kg or more of 53 patients with catheters described as having an “AVF/AVG maturing” and present in the consecutive ESRD CPM project year, 64% had a functioning AVF/AVG the following year. For those with “transplantation scheduled” listed as a reason for a vascular catheter (N = 83), 69% underwent transplantation within 1 year, and median time to transplantation was 115 days of all children with vascular catheters (N = 755), 32.2% underwent transplantation within 1 year, and median time to transplantation was 264 days compared with 21.7% and 347 days for those with AVFs/AVGs, respectively (N = 529). Of the 445 incident children in this cohort, 89% had a vascular catheter at dialysis therapy initiation. Vascular catheter use in children on HD therapy is high. This is partially explained by expeditious transplantation and technical barriers to AVF/AVG placement in small children; however, only one-third of patients with a vascular catheter underwent transplantation within 1 year. Interventions to decrease vascular catheter use in this population may be necessary.

STUDIES RELATED TO STRESS OF MOTHERS OF CHILDREN WITH HEMODIALYSIS

FRIEDMAN AC (2006) conducted a study on “A border burden of end stage renal disease with hemodialysis on children and their mothers” in department of paediatrics brown medical school, rhode island, USA .When a child has end stage renal disease and require dialysis. A heavy personal and financial toll can be extracted from the caregivers and the family. Isai et al have demonstrated an adverse effect on the psychosocial and socio-economic well being of mothers of children on chronic hemodialysis .these findings raise others questions and force us to think about support for the mothers and the children.

ROMER G, et al (2006) conducted a study on “How children experience a mother being chronically ill; a qualitative analysis of interview with children of hemodialysis” in university Hamburg, semi- structured interviews with 8 children and adolescents between 6 17 yrs and with mothers . All individuals showed a strong sense of responsibility. Young children suffered from sadness, results require enormous efforts of psychosocial adaptation.

AUER J.C (2002) conducted a study on “Hemodialysis a family matter” in Oxford kidney unit, UK. The children and his (or) her treatment the main focus of the multidisciplinary team in renal unit. Most importance children life that spent at home, outside the hospital careers experience may of the stress associated with mothers. This paper focus on the need for imagination and understand the family of children and suggest ways in needs can be met.

STARZOSMKI et al (2000) conducted a study on “ Children and family adjustment to kidney transplantation with and without an interim periods of hemodialysis” in university of Victoria,Columbia,Canada.20 children and there mothers were studied longitudinally illness and family expressed low to moderate uncertainty that decreased over time from the transplant were more physically and psycho locally affected than children results, transplantation without prior hemodialysis resulted in less physical and psychological impact for children and their mothers. These findings point to a need for interdisciplinary education and support programme for mothers and their children

BRUNIER GM, et al (1999) conducted a study on “ The impact of home hemodialysis on the family “ this critique of 48 research reports published since 1967 summarize. The efforts of family members assisting with home hemodialysis, important societal sender and economic affecting manner with end stage renal disease and their families have been looked. More active comprehensive perspective would illuminate the range of effects home hemodialysis has on the family especially mothers.

MACDONALD,H (1998) conducted a study on “Chronic renal disease and hemodialysis ,the mothers experience” In qualitative study mothers(n=4) of children with hemodialysis were asked to share their children illness. The central theme of uncertainty emerged from the data and described in 3 phase (a) Find out(b) Learning to live with chronic illness(c) Worries and dreams about the future in phase there, learning to live with chronic illness is presented.

WATSON ARC (1999) conducted a study on “Stress and burden of care in mothers with children commencing renal replacement therapy” 38 children were enrolled with an age range 0.2-18 yrs. Mean stress, anxiety and depression, score were higher in mothers than fathers and score were higher in parents of patient > 10 years compared to the children group < 10 yrs, in family was a positive correlation with maternal stress and anxiety score had better performance.

MASS.M, et al(1995) conducted a study on “Reactions of families to chronic hemodialysis a preliminary report” 13 families of patient on chronic hemodialysis (with young children at home) were contacted by the social workers only seven of them agreed to family interview took place at the children home .although the interview were instructed some topics were brought up by all families and similar behavior was observed. Specially sticking was lack of empathy as well as of hostility against all human environment was expressed and children attempts at expressing empathy were suppressed

ENGEL K, et al(1979) conducted a study on “mothers of children dialysed at home, psychological assessment,” in department in nephrology, German. 10 mothers with children underlying home dialysis were examined by means of different test used in family interaction diagnosis, the mothers showed a similar cooperation as a group of psychologically “ordinary” mothers but emotional problems between the treatment the appropriate focus of such issue should include family involvement and health status treatment to home dialysis is described.

FUKUNISHI et al (1979) "Influence of mothers on school adjustment of hemodialysis children." In school children on hemodialysis, school adjustment is regarded as an important indicator for comprehensive medical care. The aim of the present study was to examine the influence of mothers on school adjustment of hemodialysis children. The children tended to indicate school maladjustment with school absenteeism and poor relationships with friends. The mothers were characterized by poor independence, poor achievement orientation, strong emotional reliance, and lack of social self-confidence, indicating emotional instability. The family environment, including the mother's psychological condition, was strongly associated with the children's maladjustment to school. The results suggested the necessity of comprehensive medical care for these children and their mothers.

NASCIMENTO et al (1989) "Roles assessment in mothers of children with chronic renal failure on hemodialysis" .. Families with a child on chronic have to assume hemodialysis a significant burden of care, intensifying the demands and the reorganization of roles in the mothers of children. The purpose of this study is to describe the implications of role changes in mothers of children with chronic renal disease on hemodialysis. This is a case study of 14 mothers of children with chronic renal disease on hemodialysis. Fourteen mothers participate in the study. After the child's chronic kidney failure and the start of treatment, each relative's ways, acts and functions are changed, maintained or adapted to the new family dynamics, imposed by the child's treatment conditions. Appropriate role

assessment provides the nurse and the families of children with chronic renal failure on hemodialysis with insight regarding current and potential health problems and aids in identifying the needs of the mothers

HULSTISN GM, et al.(1986)” Hemodialysis treatment in children and parental stress.” In Department of Medical Psychology, University Hospital Nijmegen, The Netherlands. The burden placed on the parents of a child in dialysis treatment can induce negative effects on the medical treatment and on the psychological development of the child. To identify which families are at risk, both parents of 14 out of 16 eligible children with hemodialysis answered an extensive questionnaire three times during one year. Large differences were found between the families with regard to the amount of stress experienced. Parents of older children (> 5 years) (and particularly parents of children with a failed transplantation) experienced significantly more stress. The nature of the stress was determined more by the psychological aspects than by the medical aspects of the treatment. Concern about the future contributed most to the stress experienced. Therefore, emotional support as well as practical help for families at risk is recommended.

STUDIES RELATED TO COPING OF MOTHER WITH HEMODIALYSIS CHILDREN:

WEDEBUSCH , et al (2010) conducted a study on “Health related quality of life, psychosocial strains, and coping in mothers of children with hemodialysis” in department of medical psychology, university of hospital, Germany.

Participating in the study were 195 mothers age 43+/- 8 yrs .mothers of children undergoing hemodialysis experience more limitation in quality of life, mothers having higher strains . In the comprehensive care for families with a child suffering from dialysis screening of psychological strain and ways of coping with applying intervention to strengthen adaptive coping strategies

MADDEN SJ, et al(2002) conducted a study on “Psychological adjustment in children with hemodialysis the impact of maternal stress and coping” in psychological medicine, Great ormand street Hospital for children, London, UK. To explore maternal and child prespective on children adjustment in paediatric renal disease, and maternal psychological variable the may account for variance in child and maternal rating.43 children with hemodialysis and their mothers reported on their own health and strategies they used to cope with their child illness

OBRECHT JA, et al(2002) conducted a study on, “A case illustration of family management style in childhood hemodialysis” 20 families of children with hemodialysis experience their situation based on how they define the illness, manage it, and view the consequence of illness on the family and individual family member 2 separate interview session were analyzed. the families management style changed from struggling to adaptive over a 1-year period following the child’s hemodialysis.

CIMETEG(2002) conducted a study on “stress factors and coping strategies of parent with children treated by hemodialysis” in Marmara university school

of nursing, department of child health nursing, Turkey. A qualitative study stress of parents included financial problem, growth and development of illness, coping strategies of parents were to give their attention to the feeling other pray.

CHRISTENSEN AJ, et al(1999) conducted a study on” Perceived family support as a moderator psychological well- being in end stage renal disease and hemodialysis” in department of psychology ,university of UTAH, Lake city. Children (n=57) completed a measure of perceived family support and an assessment of the physical impact of their illness. In their illness. In their the perceived level of family support was not significantly related to their relatively lower reported level of depression and anxiety.

FIELDING D, et al(1995) conducted a study on “ Children with hemodialysis ;psychological effects and adaptation on parent and children and siblings” 32 children diagnosed as renal failure their parent and siblings were the subjects of this study. Anxiety,depression,and coping strategies. Mothers anxiety and depression and coping strategies were also positively correlated with those of fathers. siblings and the sick child did not have more behavior problems.

WATSON, AR(1995) conducted a study on “coping strategies to support families of children with hemodialysis” in paediatric renal unit, Hospital NHS ,Nottingham,UK. The burden of care for families looking after children with end stage renal failure can be considerable, specially it involves home hemodialysis and supplementary feeding. Good communication with the family and between team members delivering the multidisplinary care is essential.20 children of

parents are involved. Stress may be partly reduced by meeting the information needs and supplementing the spoken word with booklets, videos, tape recorder interview and play preparation for children. Family appreciate a continuum of care between the Hospital and community.

REICHWACD, et al (1989) conducted a study on “ Psychosocial adaptation of children their parents. To Hospital and home hemodialysis” psychological adaptation of 20 children treated by regular hemodialysis and their parent. The results in 10 children treated in the centre and 10 children followed at home were compared. the burden of children treated induced by therapy as well as compliance, home dialysis usually provoked more fear of aggressive feeding in children and stress in parents but was superior to centre treated children. A comprehensive programme of psychosocial care of children including detailed instruction for parents of children on regular hemodialysis.

THOMAS A WHELAN , et al (1988) “ Coping of parents with dialysis children “of a child can be a very stressful experience, not only for the patient but also for the child's parent(s). In fact, some parents of dialysed children rate their own anxiety as higher than their child's anxiety. The emotional state of parents can affect that of their child. Researchers have explained this process in terms of the emotional contagion hypothesis or crisis theory. However, further investigation is required to better understand the communication of emotion between child and parent. The factors underlying a parent's vulnerability to emotional problems have received relatively little attention from researchers. The empirical studies that have

been published suggest that key determinants of a child's hospitalization relate to how the parent appraises the hospital stressors that confront them (and their child) and how he or she evaluates the resources available to help cope with the situation. This indicates that researchparents'beliefabouthospitalisation would be of benefit. Such investigation could assist in the identification of those who are at risk of poor adjustment and could lead to the development of interventions to improve parental adjustment and, as a consequence, help child patients to better cope.

NATALIYA ZELIKOVSKY, et al (1988)”Parent Stress and Coping: Waiting for a Child to Receive a Hemodialysis” The current study examined the degree of parent stress and depression among mothers and fathers of children with end-stage renal disease (ESRD) listed for a kidney transplant, to determine whether demographic factors, stress, and coping would predict parent depression. Eighty-six mothers and 58 fathers of children with ESRD preparing for a kidney transplant completed standardized measures of parent stress related to the child’s chronic illness (PIP), coping style (Brief Cope), and depression (BDI-II). Information about the disease was obtained from the medical record. Maternal depression was predicted by having a lower family income, higher degree of parent stress associated with the child’s illness, and the use of avoidant coping strategies. Paternal depression was only predicted by higher parent stress. Illness related variables did not contribute significantly to the understanding of parent outcomes. Pre-transplant evaluations should screen for elevated levels of stress and depression, and develop interventions to help parents cope with their child’s renal disease.

CHAPTER – III

METHODOLOGY

According to sharma (1990) research methodology involves systematic procedures which the researcher starts from initial identification of the problem to its final conclusions. The role of methodology consists of procedures and techniques for conducting study. This chapter deals with the methodological approach adopted for the study.

The purpose of present study is to assess the stress and coping strategies of mothers of children with haemodialysis methodology for the present study involves,

- Description of research approach
- Research design
- Study setting
- Target population
- Sample sampling technique
- Selection criteria
- Selection and development of instrument
- Content validity / Reliability
- Pilot study
- Data collection procedure and plan for data analysis

RESEARCH APPROACH

A research approach tells the researcher from whom the data is to be collected, how to collect it and how to analyse them. It also suggests possible conclusions and helps the researcher in answering questions in the most accurate and efficient way (Rose Grippa and Gomey Lucero, 1994).

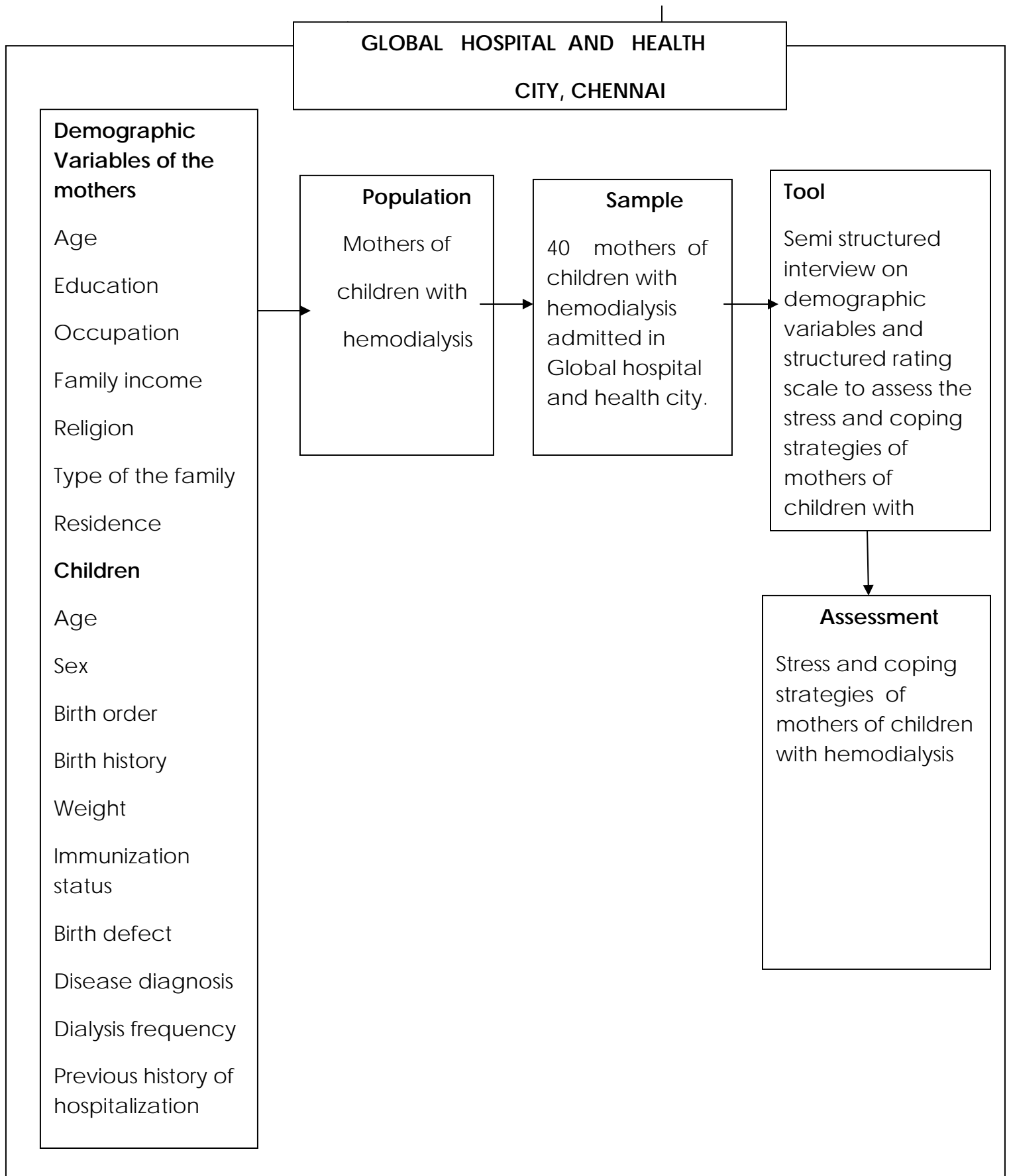
The research approach for this study is descriptive in nature the descriptive approach aimed at assessing the stress and coping strategies of mothers of children undergoing haemodialysis.

RESEARCH DESIGN

Research design refer to the over all plan for obtaining answer to the research problem. It spells out the basic strategies that the researcher adopts to collect information, that is accurate, objective and interpretable.

Research design for this study is descriptive non-experimental in nature with the objective of assessing the stress and coping of mothers of children's with hamodialysis.

SCHEMATIC REPRESENTATION OF THE RESEARCH DESIGN



SETTING OF THE STUDY

Setting is the physical location and condition in which data collection takes place (Ploit and hungler 1999).

The present study was conducted at Global Hospital and Health City , Chennai, Tamil Nadu , This is a 500 bedded hospital with all specialty units and respective out patient clinics people within Tamil Nadu and nearby states like Andra Pradesh, kerala, karnataka. Etc. utilize the service rendered by this hospital

Comprising patient care research and education the Global Hospital is a shining example. The research center comprises of the division of clinical Research, cardiology, nephrology, oncology, hematology.

Continuing medical education for the medical undergraduates the practitioner of the sophisticated doctoral and post doctoral programme, of the scientist and continuing nursing education to the nursing staff.

In 500 beds 150 are free over, 50,000 patients as seen annually, they are drawn from all over the India, This hospital state of art facilities of diagnosis, evaluation and treatment of all specialty this hospital have a kidney institute separately. And dialysis unit contains 10beds , this study was conducted in both inpatient and out patient department.

TARGET POPULATION

Population is defined as the entire aggregation of cases that meet a designated set of criteria (Polit and Hungler)

The target population of the present study include mothers who have children with undergoing haemodialysis in Global Hospital and Health City for treatment

SAMPLE AND SAMPLING TECHNIQUE

Sample is a sub set of the population selected to participate in a research study. Sampling is the process of selecting a portion of the population to represent the entire population. The sample size for the present study was 40 mothers of children with haemodialysis admitted in Global Hospitals and Health City. Among them 40 mothers were selected by using random sampling through lottery method.

SELECTION CRITERIA

Inclusive

1. Mothers of children with haemodialysis
2. Sample 40 for this study.

Exclusive

1. Mothers having children with other conditions.
2. Mothers who were not willing to participate in the study

SELECTION AND DEVELOPMENT OF INSTRUMENT

Selection of the Tool

Semi structured interview schedule was prepared on knowledge of Haemodialysis, structured rating scale was used to assess the stress and the coping of mother of children with haemodialysis, Semi structured interview schedule is considered to be the most appropriate instrument to elicit the responses from the clients.

Development of the tool

In the process of developing the tool, the investigator reviewed the research and non-research literature and discussed with subject experts in the nursing field. This helped in section of the content for the development of the tool.

Description of the tool

The semi structured interview schedule and structured stress rating scale stress and coping scale was organized in four sections A,B, and C.

Section A

Part 1:

Deals with socio demographics variables of mother of children with haemodialysis , It was constructed to record the age of the mother, Education, type of the family. Occupation, family, income and religion,Residence.

Part 2:

Deals with demographics variables of children with haemodialysis. A Demographic proforma was constructed to record the Age, Sex, Birth Order, Birth History, Weight, Immunization, status, Birth defect, Disease diagnosis, Dialysis frequency, Previous history of hospitalization, Family History, Each of these items were structured and possible options were given.

Section B

A stress rating scale was used to assess the degree of stress experienced by mothers. A stress rating scale and the form of a structured interview schedule was prepared by the researcher as there was no consolidated available to assess the stress of the mother with Haemodialysis children. Some standardized scales were reviewed such as the professor Srivatsav, stress scale by professor Lazarus, coping scale by likert and mooney's problem check-list

The stress rating scale was a 4 point rating scale comprising 25 items, there were 5 items depicting the physiological manifestations of stress and 20 items representing psycho-social manifestations of stress.

The investigator elicited the degree of the stress experienced by the mothers by the 4 point rating which are **“always” “frequently”, “sometimes” and “never”**.

Section C

To identify the coping strategies adopted by the mother to deal with stress, initially a coping inventory was developed, with **“often”, “sometimes”, “once”** and **“always”** response by the investigator, the items were selected through a review of standardized coping scale, some of the coping behavior were modified from the list of likert and Lazarus coping strategies. The coping inventory comprised of 25 items related to personal feelings.

CONVENT VALIDITY

Validity is the most important simple methodological criteria for evaluating any measuring instrument. Validity refers to the degree to which any measure or procedure succeeds in what it purports to do.

The experts in the field of nursing, pediatrics, psychology psychiatric and medicine to examine the relevancy and accuracy of the items.

OUTCOME OF VALIDITY

Demographic performa

There was 100% agreement in all the item. As per the suggestions of experts the item on 'type of family' for the mother was included in the performa. It contains 7 items.

Stress rating scale

Out of 30 items initially present in the tool, 5 items were rejected, and compounding of certain items was necessary as there was overlapping of the contents. Consequently the tool comprised of 25 items.

Coping inventory

Initially there were 30 items present in the tool. After the experts opinion the tool comprised of 25 items.

All the items were accessed with the suggestions of re-organizing the order of questions.

RELIABILITY

The semi structured interview schedule was tried out with 4 mothers of children with haemodialysis, who were admitted in dialysis unit in Government Head quarter Hospital, Erode. The Spearman Browns split half estimated reliability co-efficient correlation was found to be $r' = 0.98$ which indicates high reliability of the questions.

PILOT STUDY

Pilot and Hunger (1995) stated that he pilot study small-scale version of trial run for the major study. The function of this pilot study is to obtain information for improving the project or for assessing its feasibility.

After obtaining permission from the concerned authority a pilot study was conducted in month of June 2010. Four mothers of children with haemodialysis were selected in the out-patient department. The interview schedule was translated into Tamil, so the mothers responded to the questions and they were able to understand. The investigator took an average time about 45 minutes each interview

DATA COLLECION PROCEDURE

After getting permission from the concerned authority, the data was collected during the month of June 2010 in the selected Global hospitals, Health city, Chennai,

The purpose of the interview was explained to all the mothers with self introduction. The interview was conducted with their consent. For all the 40 mothers the investigator took an average of 45-50 minutes for each interview. Two mothers were interviewed in a day. During the interview the mothers were very co-operative.

PLAN FOR DATA ANALYSIS

The data were analysed in terms of the objectives of the study using descriptive and inferential statistics.

The plan for data analysis as follows

1. The frequencies and percentages for the analysis of demographic variables
2. Range of scores, means, standard deviation and mean score percentage for stress and coping strategies.
3. The correlation co-efficient to find out the relation ship between demographic variables and stress.
4. The correlation co-efficient to find out the relationship between demographic variables and coping strategies.
5. Observed scores for comparison with stress and coping strategies.
6. Chi-square (X²) anaysis for finding relationship between,
 - Relate the demographic characteristics with the stress factors.
 - Relate the demographic characteristics with the coping strategies.

CONCLUSION:

This chapter deals with methodology undertaken for the study. It includes the research approach ,research design, study setting ,population, sample sample technique ,development and description of the tool, valitidy, reliability, pilot study, data collection procedure and plan for data analysis.

CHAPTER-IV

DATA ANALYSIS, INTERPRETATION AND DISCUSSION

The chapter deals with analysis and interpretation of the data collected from 40 mothers of hemodialysis children admitted in the Global hospital and health city, Chennai.

Kerlinger(1973) defines analysis is to reduce the data into intelligible and interpretable form, so that the research problem can be studied and tested including relationship between the variables.

The data collected through structured rating scale interview schedule were analysed by using descriptive and inferential statistics, which are necessary to provide a substantive summary of results in relation to the following specified objectives.

Objectives are

6. To assess the knowledge of mothers on renal failure.
7. To assess the stress experience by mothers if children undergoing hemodialysis
8. To identify the coping strategies of mothers of children undergoing hemodialysis.
9. To compare the stress and coping strategies of mothers of children undergoing hemodialysis.
10. To determine the stress and coping strategies with selected demographic characteristics like age, education, occupation, religion, income, types of family

DESCRIPTION OF DATA

The data is organized and presented under the following sections.

SECTION I

Description of demographic variables of Hemodialysis children and socio-demographic variables of mothers children undergoing hemodialysis using percentage analysis

SECTION II

Descriptive analysis on the stress faced by mothers of children undergoing hemodialysis were through mean, standard deviation and mean score percentage.

SECTION III

Descriptive analysis regarding the coping strategies adapted by the mothers of children undergoing hemodialysis were carried out through the application of mean, standard deviation and mean score percentage.

SECTION IV

Inferential statistics , especially Chi-square test is employed to bring out the association between the selected socio demographic variables such as Age, Education, Occupation, Family income, residence, type of family, Age of the child, Sex, Birth order, Birth history, Birth weight, Immunization, Birth defect, Frequency of dialysis, Age of diagnosis and Family history with the stress factors faced by mothers of hemodialysis children

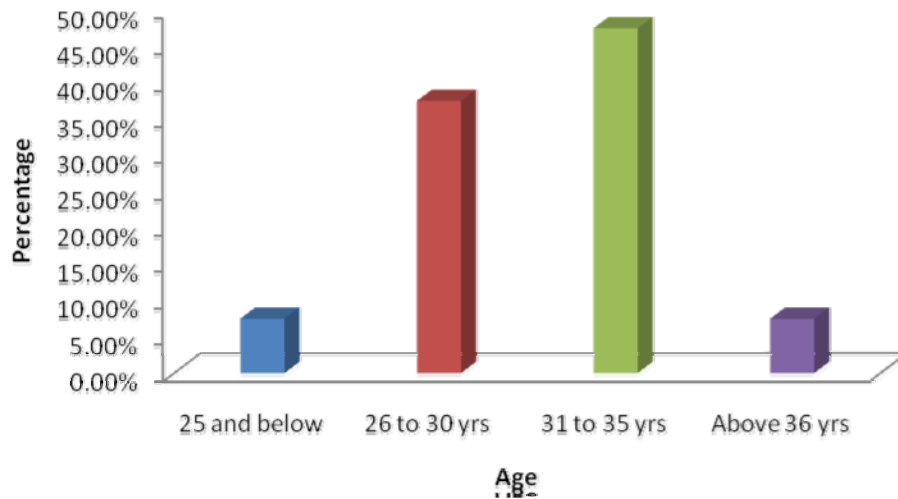
SECTION –I

SOCIO-DEMOGRAPHIC VARIABLES OF MOTHERS.

Table 4.1.1 Distribution of mothers by their Age

S.No	Age	Numbers(40)	Percentage
1.	25 and below	3	7.5%
2.	26 to 30 yrs	15	37.5%
3.	31 to 35 yrs	19	47.5%
4.	Above 36 yrs	3	7.5%

Fig 4.1.1 Distribution of mothers by their Age

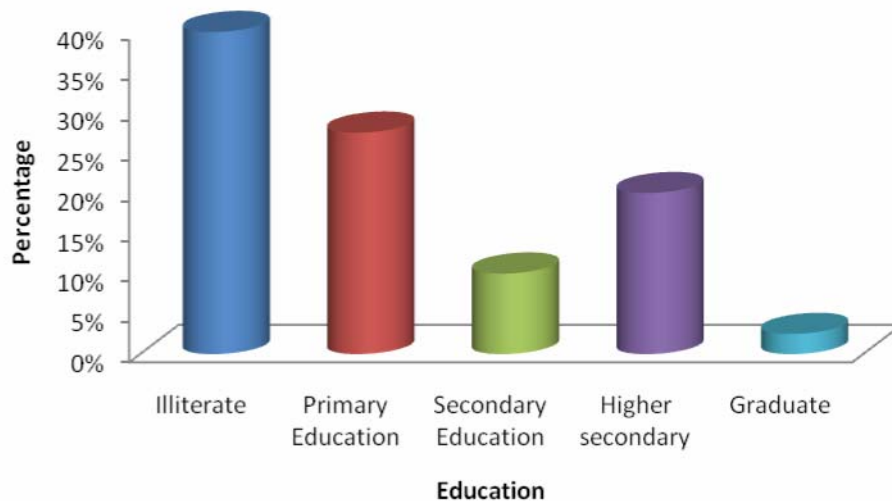


The data presented in the figure 4.1.1 shows the maximum number of subject 47.5% are from the age group of 31 to 35 yrs, 37.5% are from age group of 26 – 30 yrs, 7.5% are from the age group of above 36 yrs and 7.5% are from the age group of below 25 yrs.

Table 4.1.2 Distribution of mothers by their Education

S.No	Education	Numbers(40)	Percentage
1.	Illiterate	16	40%
2.	Primary Education	11	27.5%
3.	Secondary Education	4	10%
4.	Higher secondary	8	20%
5.	Graduate	1	2.5%

Fig 4.1.2 Distribution of mothers by their Education:

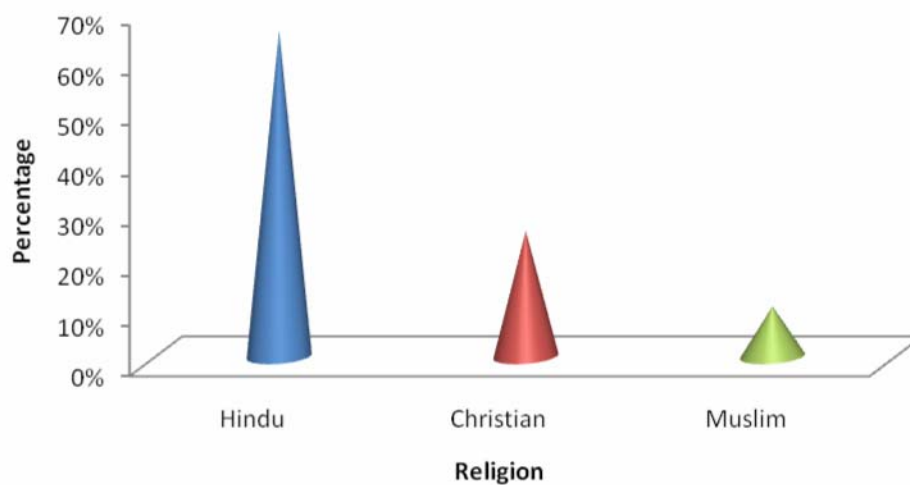


The data presented in the figure 4.1.2 shows the majority of mothers 40 % are Illiterate, 27.5% of mothers have primary education, 20 % of mothers have higher secondary education. 10 .% of mothers have secondary education, 2.5% of mothers have graduate.

Table 4.1.3 Distribution of mothers by their Religion

S.No	Religion	Numbers(40)	Percentage
1.	Hindu	26	65%
2.	Christian	10	25%
3.	Muslim	4	10%

Fig 4.1.2 Distribution of mothers by their Religion



The data presented in the figure 4.1.3 shows the majority of 65 % respondents are Hindu, 25% of them are Christians and 10% of them are muslims.

Table 4.1.4 Distribution of mothers by their Occupation

S.No	Occupation	Numbers(40)	Percentage
1.	Home maker	31	77.5%
2.	Skilled worker	2	5%
3.	Unskilled Worker	0	0
4.	Professional	7	17.5%

Fig 4.1.4 Distribution of mothers by their Occupation

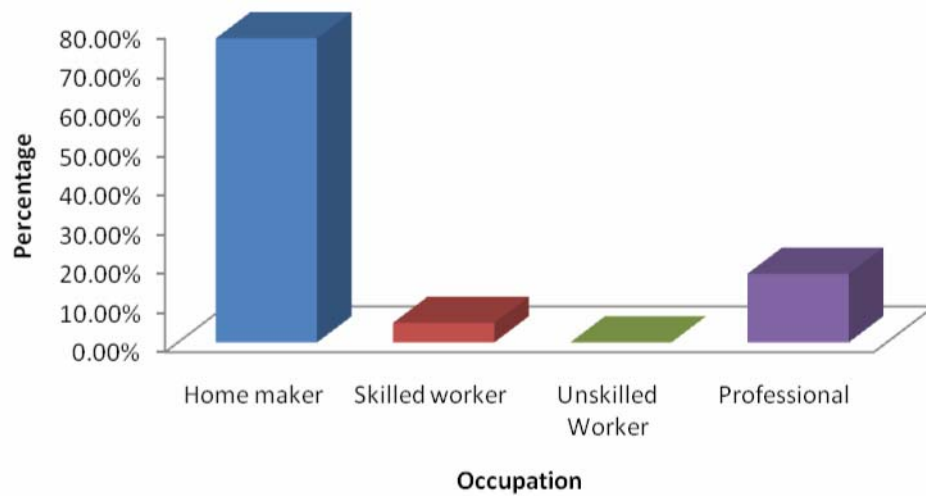
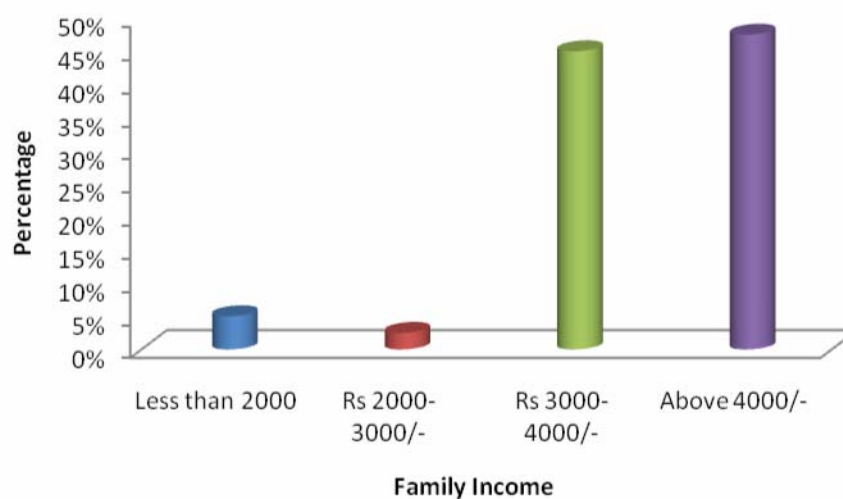


Figure 4.1.4 shows the majority of mothers 77.5 % are homemakers, 17.5 % of them are professional and 5% of them are skilled workers 0% of them are unskilled workers.

Table 4.1.5 Distribution of mothers by their Family Income

S.No	Family Income	Numbers(40)	Percentage
1.	Less than 2000	2	5%
2.	Rs 2000-3000/-	1	2.5%
3.	Rs 3000-4000/-	18	45%
4.	Above 4000/-	19	47.5%

Fig 4.1.5 Distribution of mothers by their Family Income

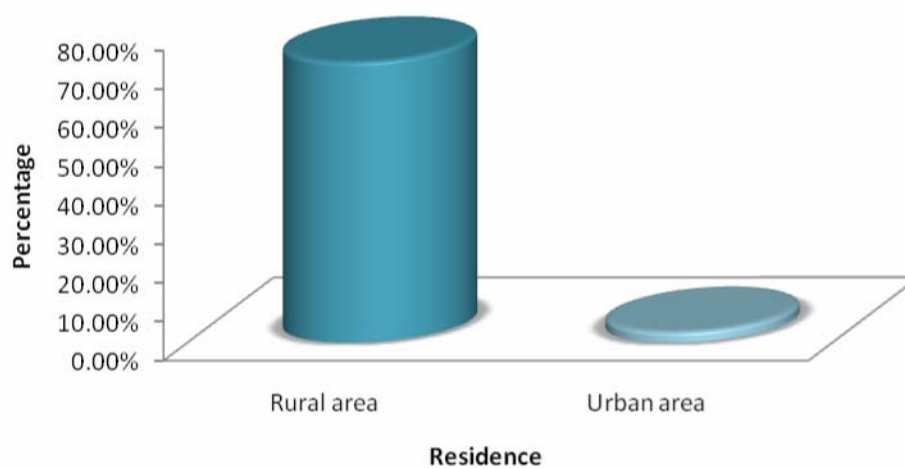


The data presented in figure 4.1.5 shows the most of their family, 47.5% income is Above Rs.4001/- , 45% of family income is between Rs.3001-4001 and 5% of family Income is less than 2000/-, 2.5% of family income is Rs 2000-3000/-.

Table 4.1.6 Distribution of mothers by their Residence

S.No	Residence	Numbers(40)	Percentage
1.	Rural area	27	72.5%
2.	Urban area	11	2.75%

Fig 4.1.6 Distribution of mothers by their Residence

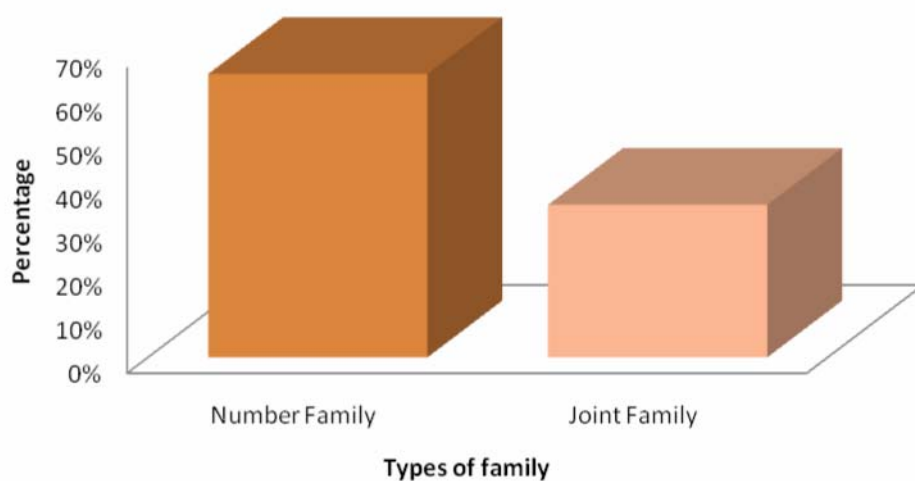


The data presented in figure 4.1.6 shows that 72.5% mothers are in rural area and 2.75 mothers are in urban area.

Table 4.1.7 Distribution of mothers by their types of family

S.No	Types of family	Numbers(40)	Percentage
1.	Nuclear Family	26	65%
2.	Joint Family	14	35%

Fig 4.1.7 Distribution of mothers by their Residence



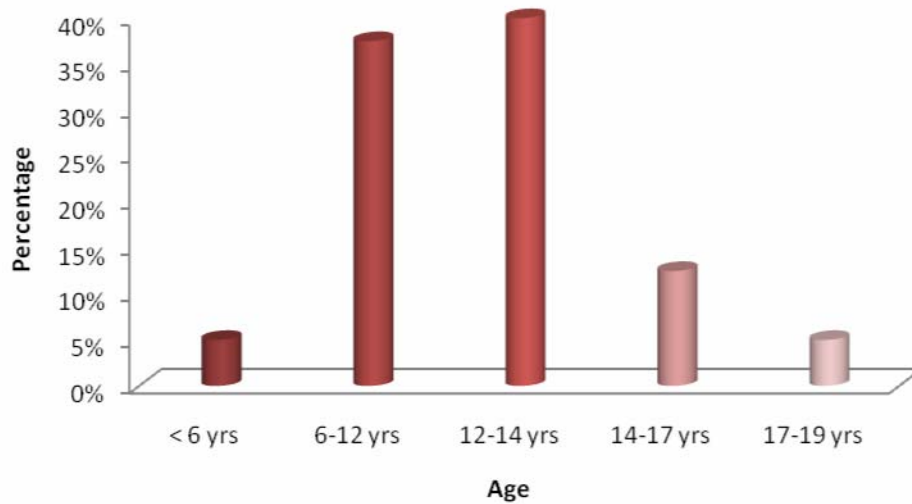
The data presented in figure 4.1.7 shows that 65% of mothers are in Nuclear family, 35% mothers are in joint family.

Socio-Demographic variables of Child.

Table 4.1.8 Distribution of child by their Age

S.No	Age	Numbers(40)	Percentage
1.	< 6 yrs	2	5%
2.	6-12 yrs	15	37.5%
3.	12-14 yrs	16	40%
4.	14-17 yrs	5	12.5%
5.	17-19 yrs	2	5%

Fig 4.1.8 Distribution of child by their Age

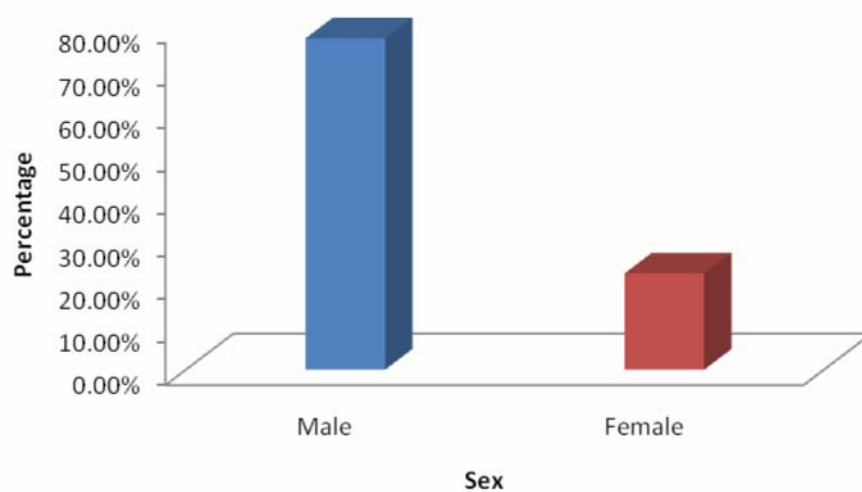


The data presented in the figure 4.1.8 show the majority number of subjects. 40% are from the age group of 12-14 yrs, 37.5% are from 6-12 yrs, 12.5% are from 14-17 yrs age group, 5% are from 17-19 yrs and 5% below 6 years.

Table 4.1.9 Distribution of child by their Sex

S.No	Sex	Number(40)	Percentage
1.	Male	31	77.5%
2.	Female	9	22.5%

Fig 4.1.9 Distribution of child by their Sex

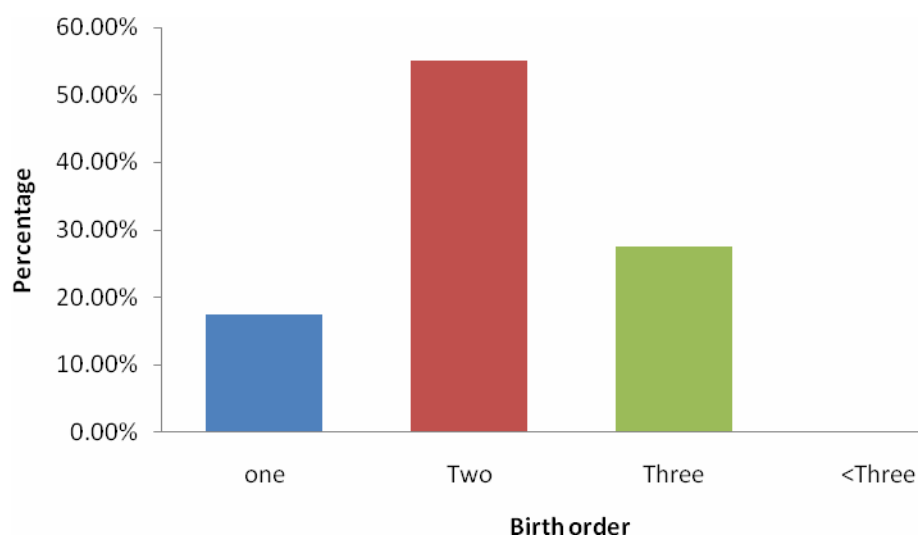


The data presented in the figure 4.1.9 shows that majority number of children 77.5% are Male, 22.5% are female.

Table 4.1.10 Distribution of child by their Birth Order

S.No	Birth Order	Number(40)	Percentage
1.	one	7	17.5%
2.	Two	22	55%
3.	Three	11	27.5%
4.	<Three	0	0

Fig 4.1.10 Distribution of child by their Birth order

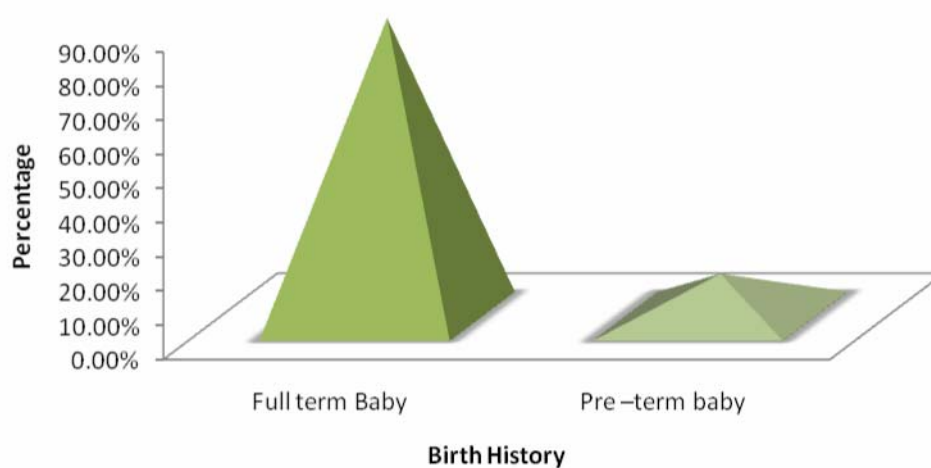


The data represent the figure 4.1.10 shows the majority of children 55% are in the 2nd Birth order, 27.5% are in the 3rd birth order and 17.5% are in the 1st birth order.

Table 4.1.11 Distribution of child by their Birth history

S.No	Birth History	Number (40)	Percentage
1.	Full term Baby	35	87.5%
2.	Pre –term baby	5	12.5%

Fig 4.1.11 Distribution of child by their Birth order

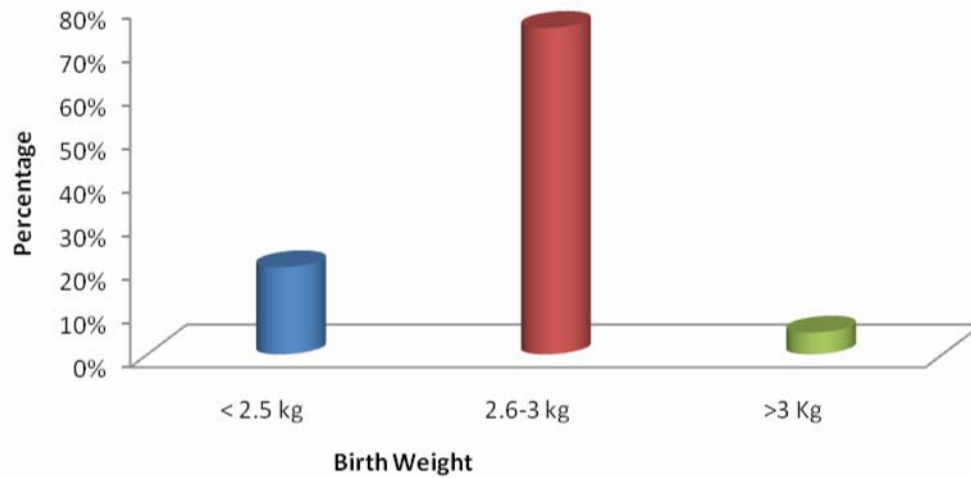


The data represent the figure 4.1.11 shows the majority of 87.5% represents are full term baby and 12.5% of them are pre-term baby.

Table 4.1.12 Distribution of child by their Birth Weight

S.No	Birth Weight	Number (40)	Percentage
1.	< 2.5 kg	8	20%
2.	2.6-3 kg	30	75%
3.	>3 Kg	2	5%

Fig 4.1.12 Distribution of child by their Birth Weight

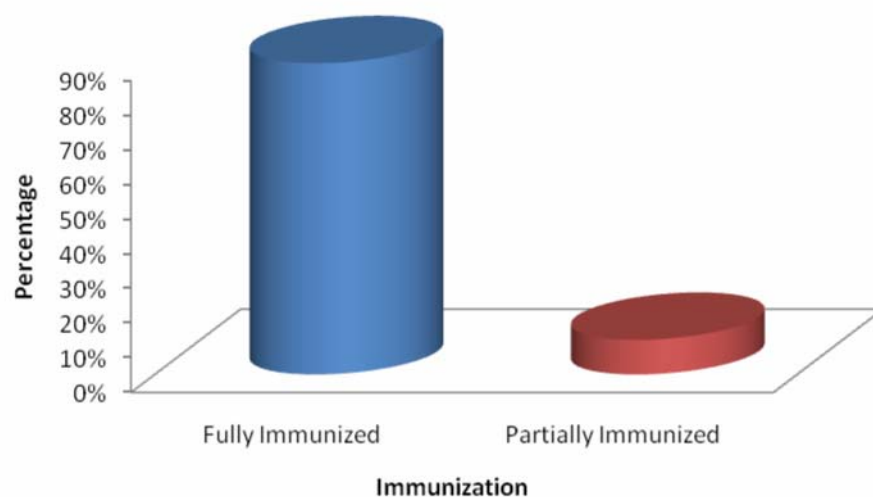


The data represent the figure 4.1.12 shows the majority of 75% of children are between 2.6-3 kg and 20% of them are in below 2.5 kg , 5% of them are in above 3kg.

Table 4.1.13 Distribution of child by their Immunization

S.No	Imunnization	Number (40)	Percentage
1.	Fully Immunized	36	90%
2.	Partially Immunized	4	10%

Fig 4.1.13 Distribution of child by their Birth Immunization

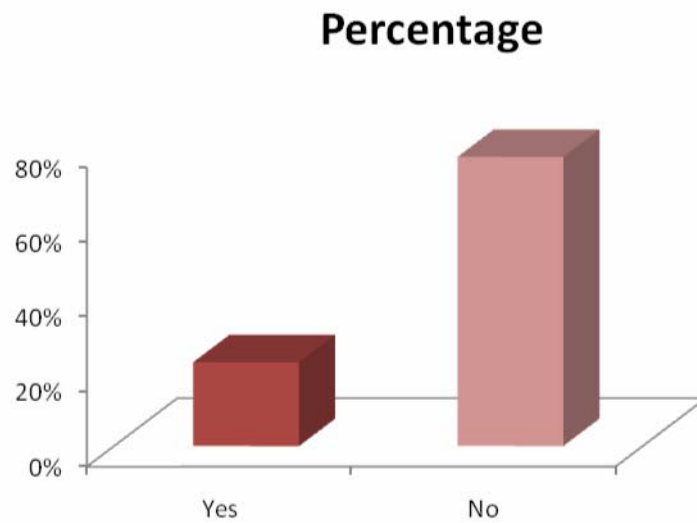


The data represent the figure 4.1.13 shows the majority of children 90% are fully Immunized, 10 % of them are partially Immunized.

Table 4.1.14 Distribution of children by their birth defect

S.No	Birth defect	Number (40)	Percentage
1.	Yes	9	22.5%
2.	No	31	77.5%

Fig 4.1.14 Distribution of child by their Birth Defect

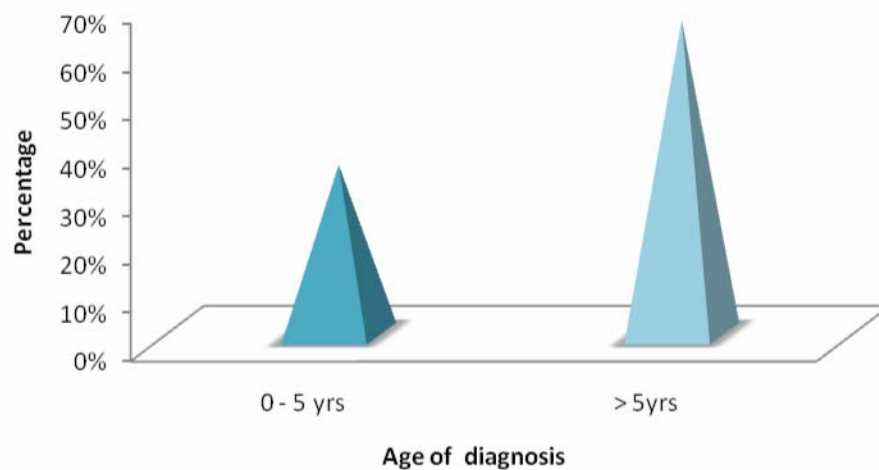


The data represent the figure 4.1.14 shows the majority 77.5% are not having birth defects and 22.5% are having birth defects.

Table 4.1.15 Distribution of children by their age of diagnosis

S.No	Age of Diagnosis	Number (40)	Percentage
1.	0 - 5 yrs	14	35%
2.	> 5yrs	26	65%

Fig 4.1.15 Distribution of child by their age of diagnosis

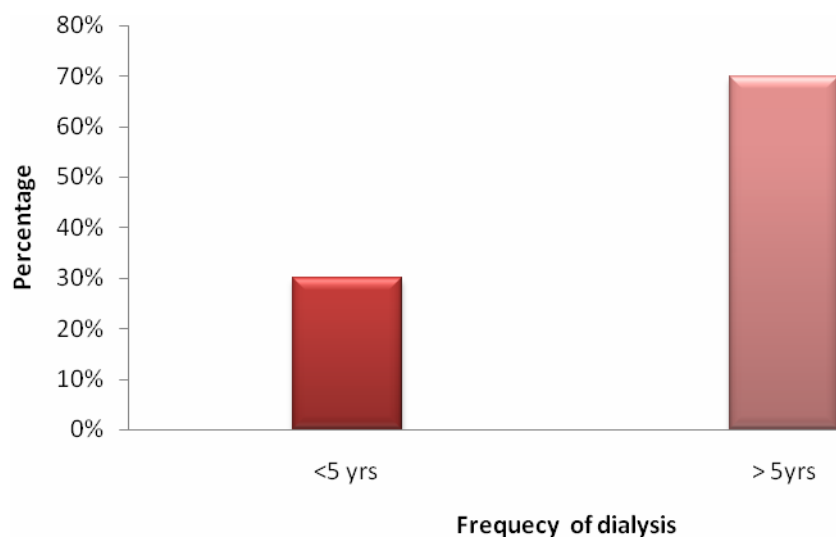


The data represent the figure 4.1.15 shows the majority of children 65% are in above 5 yrs and 35% are in below 5 years.

Table 4.1.16 Distribution of children by their Frequency of dialysis

S.No	Frequency of dialysis	Number (40)	Percentage
1.	<5 yrs	12	30%
2.	> 5yrs	28	70%

Fig 4.1.16 Distribution of child by their Frequency of dialysis



The data represent the figure 4.1.16 shows the majority of children 70% are in below 5 yrs and 30% are in above 5 years.

**Table 4.1.17 Distribution of children by their Previous History of
Hospitalization:**

S.No	Previous history of hospitalization	Number(40)	Percentage
1.	Yes	5	12.5%
2.	No	35	87.5%

**Fig 4.1.17 Distribution of children by their Previous History of
Hospitalization:**

Percentage

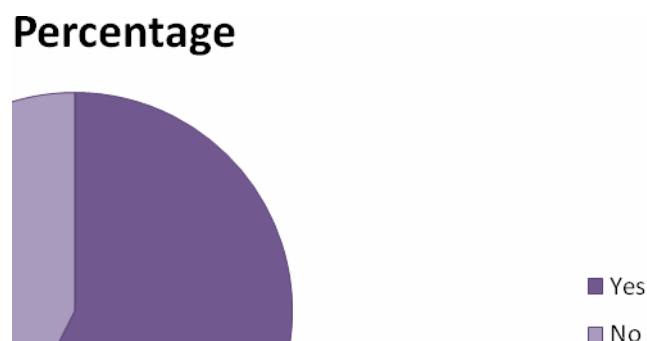


The data represent the figure 4.1.17 shows the majority 87.5 of children in the category of yes and 12.5% of them are no Category.

Table 4.1.18 Distribution of children by their Family history:

S.No	Family history	Number(40)	Percentage
1.	Yes	23	57.5%
2.	No	17	42.5%

Fig 4.1.18 Distribution of children by their Family history:



The data represent the figure 4.1.18 shows the majority 57.5% of children are not having the family history of renal disease and 42.5% of them are having the family history of renal disease.

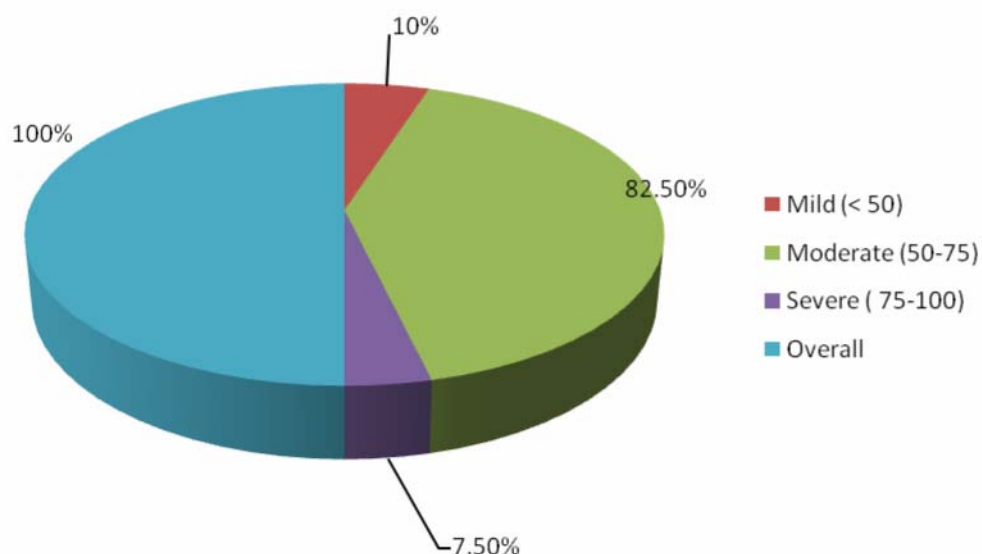
SECTION 4.2

ASSESSMENT OF STRESS OF MOTHERS OF CHILDREN UNDERGOING HEMODIALYSIS IN ASELECTED HOSPITALS.

**Table 4.2.1 Stress level of Mothers whose children were undergoing
hemodialysis in selected hospitals.**

Stress level of Mothers	Respondents	
	Number	Percentage
Mild (< 50)	4	10%
Moderate (50-75)	33	82.5%
Severe (75-100)	3	7.5%
Overall	40	100%

**Fig 4.2.1 Stress level of mothers whose children undergoing hemodialysis in
selected hospitals.**



Assessment of stress level of mothers whose children undergoing hemodialysis in a selected hospital. The stress level of mothers reveals mild, moderate and severe level. Table 4.21 depicts that 10% of mothers had mild level, 82.5% of mothers had moderate level, 7.5% of mothers had experience severe level of stress.

Table 4.2.2 Stress of mothers whose children were undergoing hemodialysis in a selected hospitals.

Aspects	Max Score	Range Score	Respondents stress level		
			Mean	Mean%	SD%
Stress	100	56-95	76.32	76.3	8.0

Table 4.2.2 Depicts that overall mean score of stress faced by the mothers whose children undergoing hemodialysis in selected hospitals was 76.32%, a standard deviation score percentage is 8.0% and the mean score percentage of stress faced by the mothers whose children undergoing hemodialysis in a selected hospitals is 76.32% with maximum possible score 100.

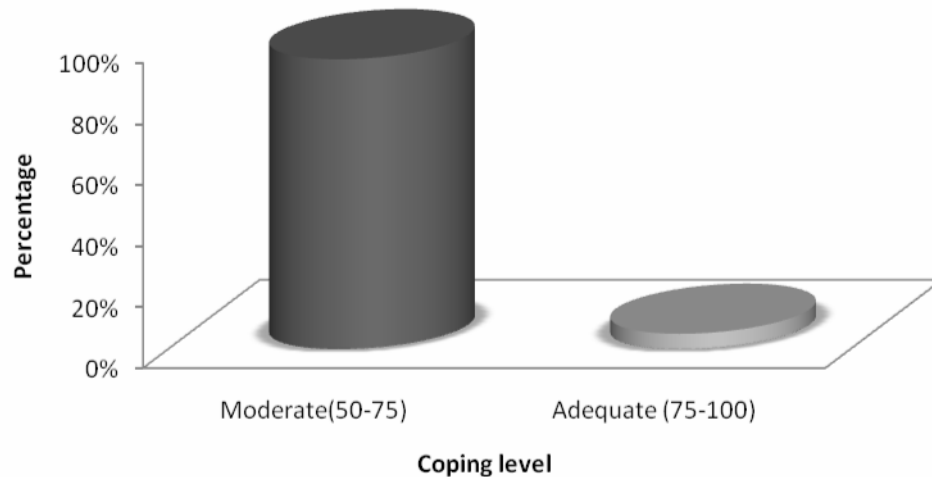
SECTION 4.3

ASSESSMENT OF COPING STRATEGIES OF MOTHERS WHOSE CHILDREN UNDERGOING HEMODIALYSIS IN A SELECTED HOSPITALS

Table 4.3.1 Coping level of mothers whose children undergoing hemodialysis in a Selected hospitals.

Coping Level	Respondents	
	Number	Percentage
Mild(<50)	-	-
Moderate (50-75)	38	95 %
Adequate (75-100)	2	5 %
Overall	40	100%

Fig 4.3.1 Coping level of mothers whose children undergoing hemodialysis in a Selected hospitals.



Assesment of coping level of mothers whose children undergoing hemodialysis in a selected hospitals. The coping level of mothers reveals mild, Moderate and adequate coping level. Table 4.3.1 depilcts that 95% of mothers had moderate coping level, 5% of mothers had experience adequate level of coping.

Table 4.3.2 Coping score of mothers whose were children undergoing hemodialysis in a Selected hospitals.

Aspects	Max Score	Range Score	Respondents		
			Mean	Mean score %	SD %
Coping Strategies	100	45-76	61.7	61.7%	8.09

Table 4.3 depicts that overall mean score of coping strategies adopted by the mothers whose children undergoing hemodialysis in a selected hospitals was 61.7 standard deviation score percentage was 8.09 and the mean score percentage of coping strategies by the mothers of children undergoing hemodialysis in a selected hospital is 61.7 with maximum possible score 100.

Table 4.3.3 Correlation Between stress and Coping among the mothers of children whose children undergoing hemodialysis in a selected hospitals.

Aspects	Scores	
Stress	1	0.31
Coping	0.31	1

Correlation is significant at the 0.05 level .The above table 4.3.2 depicts the analysis attempted to bring out the relation between stress and coping of mothers of children undergoing hemodialysis in selected hospitals. The linear correlation was worked out if it found to be statistically significant in stress with coping (R=0.31 P,0.05) respectively stress significantly correlated with coping.

ASSOCIATION BETWEEN SOCIO-DEMOGRAPHIC CHARACTERS AND STRESS LEVEL OF MOTHERS OF CHILDREN UNDERGOING HEMODIALYSIS IN SELECTED HOSPITALS.

Table 4.4.1 Association Between stress level of mothers of children whose children undergoing hemodialysis in a Selected hospitals.

S.No	Variable	Category	Stress Level						χ^2 value
			Mild	%	Moderate	%	Severe	%	
1.	Age	< 25 yrs	0	-	2	5	1	2.5	12.92
		26-30 yrs	0	-	2	5	13	32.5	
		31-35 yrs	0	-	14	35	5	12.5	
		>36 yrs	0	-	1	2.5	2	5	
2.	Education	Illiterate	0	-	10	25	6	15	3.22
		Primary	0	-	4	10	7	17.5	
		School	0	-	2	5	2	5	
		Secondary	0	-	3	7.5	5	12.5	
		Higher							

		secondary		-	0	0	1	2.5	
		Graduate	0						
3.	Religion	Hindu	1	2.5	14	3.5	11	27.5	
		Christian	0	0	3	7.5	7	17.5	3.12%
		Muslim	0	0	1	2.5	3	5	
								7.5	
4.	Occupation	House	2	5	13	32.5	16	40	
		Maker							
		Skilled	0	-	0	0	2	5	2.080
		Unskilled	0	-	4	10	3	7.5	
		workers							
		Professional	1	2.5	18	4.5	21	52.5	
		s							
5.	Family	< 2000/-	0	0	1	2.5	1	2.5	
	Income	2000-3000/-	0	0	1	2.5	0	0	4.379
		3000-4000/-	2	5	9	22.5	7	17.5	
		>4000/-	2	5	4	10	13	32.5	

6.	Residence	Rural area	0	0	15	37.5	14	35	1.755
		urban area	0	0	4	10	7	17.5	
7.	Types of family	Nuclear family	1	2.5	10	25	15	37.5	0.803
			0	0	8	20	6	15	
		Joint family							
8.	Age of the children	< 6 yrs	0	0	1	2.5	1	2.5	4.799
		6-12yrs	1	2.5	6	15	8	20	
		12-14yrs	1	2.5	9	22.5	6	15	
		14-17yrs	0	0	1	2.5	4	10	
		17-19yrs	0	0	0	0	2	5	
9.	Sex of the child	Male	0	0	15	37.5	16	40	0.569
		female	0	0	4	10	6	15	

10.	Birth order of the child	one	0	0	3	7.5	4	10	0.316
		two	0	0	10	25	12	30	
		three	0	0	6	15	5	12.5	
		<three	0	0	0	0	0	0	
11.	Birth history of child	Full term baby	1	2.5	17	42.5	17	42.5	1.733
		Pre term baby	0	0	1	2.5	4	10%	
12.	Birth weight of the child	< 2.5 kg	1	2.5	3	7.5	4	10	1.905
		2.6 to 3 kg	1	2.5	14	35	15	37.5	
		> 3 kg	0	0	0		2	5	
13.	Immunization	Fully							0.902
		Immunized	2	5	16	40	18	45	
		Partially							
		Immunized	0	0	1	2.5	3	7.5%	

14.	Birth	Yes	0	0	3	7.5	6	15	0.905
	Defect	No	0	0	16	40	15	37.5	
15.	Age of	0 to 5 yrs	1	2.5	6	15	8	8.20	0.186
	Diagnosis	5yrs and above	0	0	13	32.5	13	13	
16.	Frequency	0 to 5yrs	0	0	14	3.5	14	35	0.234
	of dialysis	>5 yrs	0	0	5	12.5	7	17.5	
17.	Previous	Yes	1	2.5	18	45	4	10	1.733
	History of Hospitalization	No	1	2.5	1	2.5	17	42.5	
18.	Family	Yes	0	0	10	25	13	32.5	0.20
	history of renal disease	No	1	2.5	9	22.5	8	20	

Significant in 5% level :-

The table 4.4.1 present the substantive summary of chi – square analysis which is used to bring out the relationship between the stress factors faced by the spouses and selected socio – demographic variables. The results showed that age, education, Religion, occupation, family Income, residence, Type of family, age of child, sex, Birth orders of child, Birth history of child. Birth weight of the child, Immunization, Birth defeat, Age of diagnosis, frequency of dialysis, previous history of hospitalization, Family History of Renal disease are significantly associated with stress faced by the mothers at 5% level (<0.05) Family Monthly Income is significantly associated with the stress faced by the mothers of children undergoing hemodialysis in a selected hospitals.

Table 4.4.2 Association Between coping level of mothers of children whose children undergoing hemodialysis in a Selected hospitals.

S.No	Variable	Category	Coping						χ^2 val ue
			Mild	%	Moderate	%	Severe	%	
1.	Age	< 25 yrs	0	0	3	7.5	0	2.5	3.22 6
		26-30 yrs	2	5	12	30	1	0	
		31-35 yrs	1	2.5	18	45	0	0	
		>36 yrs	0	0	3	7.5	0	2.5	
2.	Education	Illiterate	0	0	15	37.	1	2.5	4.85 5
		Primary	1	2.5	10	5	0	0	
		School			3	25	0	0	
		Secondary	1	2.5		7.5			
		Higher secondary			7	17.	0	0	
		Graduate	1	2.5	1	5	0	0	
			0	0		2.5			

3.	Religion	Hindu	1	2.5	24	60	1	2.5	3.55 6
		Christian	2	5	8	20	0	0	
		Muslim	0	0	4	10	0	0	
4.	Occupation	House	2	5	28	70	1	2.5	0.95 2
		Maker							
		Skilled	0	0	2	2.5	0	0	
		Unskilled workers	0	0	0	0	0	0	
		Professiona ls	1	2.5	6	15	0	0	
5.	Family	< 2000/-	0	0	1	2.5	1	2.5	19.9 55
	Income	2000-	0	0	1	2.5	0	0	
		3000/-	1	2.5	17	42.	0	0	
		3000-	2	5	17	5	0	0	
		4000/-				42.			
		>4000/-				5			

6.	Residence	Rural area	2	5	26	6.5	1	2.5	0.43
		urban area	1	2.5	10	25	0	0	2
7.	Types of family	Nuclear family	3	7.5	22	55	1	2.5	2.39
		Joint family	0	0	14	35	0	0	3
8.	Age of the children	< 6 yrs	0	0	1	2.5	1	2.5	
		6-12yrs	0	0	15	37.5	0	0	
		12-14yrs	2	5	14	35	0	0	22.6
		14-17yrs	1	2.5	4	10	0	0	
		17-19yrs	0	0	2	5.7	0	0	

9.	Sex of the child	Male	2	5	29	12.5	0	0	3.83
		female	1	2.5	7	17.5	1	2.5	
10.	Birth order of the child	one	0	0	6	15	1	2.5	7.33
		two	1	2.5	21	52.5	0	0	
		three	2	5	9	22.5	0	0	
		<three	0	0	0	0	0	0	
11.	Birth history of child	Full term baby	0	0	32	80	0	0	7.49
		Preterm baby	3	7.5	4	10	1	2.5	
12.	Birth weight of the child	< 2.5 kg	1	2.5	6	15	1	2.5	4.74
		2.6 to 3 kg	2	5	28	70	0	0	
		> 3 kg	0	0	2	5	0	0	

13.	Immunization	Fully							
		Immunized	3	7.5	33	82.5	0	0	
		Partially							9.44
		Immunized	0	0	3	7.5	1	2.5	
14.	Birth defect	Yes	0	0	3	7.5	6	15	
		No	0	0	16	40	15	37.5	0.905
15.	Age of diagnosis	0 to 5 yrs	1	2.5	13	32.5%	0	0	
		5yrs and above	2	5	23	57.5%	1	2.5%	0.562
16.	Frequency of dialysis	0 to 5yrs	0	0	27	67.5	1	2.5	
		5yrs and							7.85
		above	3	7.5	9	22.5	0	0	7

17.	Previous History of hospitalizati on	Yes	0	0	5	12.5	0	0	0.65 5
		No	3	7.5	31	77.5	1	2.5	
18.	Family history of renal disease	Yes	2	5	20	50	1	2.5	0.89 8
		No	1	2.5	16	40	0	0	

The table 4.4.2 present the substantive summary of chi – square analysis which is used to bring out the relationship between the coping strategies adopted by the mothers of children undergoing hemodialysis in a selected hospitals. the results shows that age, education, Religion, occupation, family Income, Residence, Types of family, Age of the child, sex of the child, Birth order of the child, Birth history of the child, Birth weight of the child, Immunization, Birth defect, Age of diagnosis, Frequency of dialysis, Pervious history of hospitalization, Family history of Renal disease au significantly associated with the coping strategies adopted by the mother at 5% level. ($p < 0.05$).

CHAPTER V

SUMMARY, FINDINGS, CONCLUSION, IMPLICATION, AND RECOMMENDATIONS

This chapter presents a brief accounts of the study conclusion which are drawn from the Findings and Implications of the results are recorded. It also includes recommendation for future research in the area.

SUMMARY

Descriptive survey was undertaken in the selected Global hospital and health city, Chennai, to assess the stress and coping strategies mothers of children undergoing hemodialysis.

The Objectives of the study were;

1. To assess the knowledge of mothers on renal failure.
2. To assess the stress experience by mothers if children undergoing hemodialysis
3. To identify the coping strategies of mothers of children undergoing hemodialysis.
4. To compare the stress and coping strategies of mothers of children undergoing hemodialysis.
5. To determine the stress and coping strategies with selected demographic characteristic like age, education, occupation, religion, income, types of family

A review on related literature enabled the investigator to develop the conceptual frame work, methodology, for the study and to plan the analysis of the

data in the most effective way. The conceptual frame work adapted for this study is based on Roy's adaptation model. The research approach adapted for this study was descriptive in nature. The sample consisted of 40 mothers of hemodialysis children who are admitted in the Dialysis unit in selected Global hospital, Chennai. The instrument used for the data collection was structured scale for measuring stress and coping.

The stress faced by mothers and coping strategies adapted by the hemodialysis children were analysed and using descriptive and inferential statistics.

FINDINGS OF THE STUDY:

The data collected were analysed in seven section using descriptive and inferential statistics.

Section I, among 40 mothers 47.5% are from the age group of 31-35 years, 37.5% are from the age group of 21-25 years, majority of subjects 40% are illiterate, 27.5% of mothers have primary education, 65% respondents are Hindus, 25% of them are Christians, Most of the mothers 77.5% are home makers and 17.5% are professionals. Monthly income in the most of the families 47.5% is Rs .above 4000/- and 72.5% mothers are in rural area, 65% of mothers are in nuclear family.

Among the children studies ,40% are from 12-14 years, 77.5% are males children. 55% children are in 2nd birth order. 87.5% represents are full term baby, 75% children are in 2.6-3 kg, 90% are fully immunized. 77.5% are not having

birth defect,65% are in above 5 years,70% of children having frequency of dialysis above 5 yrs, 87.5% children having previous history of hospitalization and 57.5% are having family history.

Section II, descriptive analysis on the stress faced by the mothers of children undergoing hemodialysis were through mean, median, standard deviation and mean score percentage. The mean score percentage of stress faced by the mothers with hemodialysis children is 76.3%

Section III, descriptive analysis regarding the coping strategies adapted by the mothers of hemodialysis children were carried out through the application of mean ,median, standard deviation, and mean score percentage. The mean score percentage of coping strategies adapted by the mothers with 61.7%

Section IV, inferential statistics ,especially chi-square analysed revealed that there is no significant relationship existing between stressors faced by the mothers with the socio demographic variables such as age of the mother, education, religion, occupation, family income and significant relationship demographic variable such as Type of family.

Section V, there is significant relationship between the coping strategies adapted by the mother with their socio-demographic variables such as occupation, residence.

Section VI, there is a significant relationship existing between the stress and coping strategies adapted by the mothers of children of hemodialysis.

CONCLUSION:

- Commonly the age group of 31-35 yrs of mothers of children of hemodialysis are affected by the stress due to their hemodialysis children.
- There is significant relationship between the coping strategies adapted by the mother with their, age of the mother, education, religion, occupation, family income with stressors faced by mothers of children of hemodialysis.
- There is significant relationship between the coping strategies adapted by the mother with their, socio-demographic variables such as occupation, residence are significant over the coping strategies adapted by the mothers.
- This study shows there is a significant relationship existing between the stress and coping strategies adapted by the mothers of children of hemodialysis.

IMPLICATIONS

The findings of the study have implications of Nursing service, Nursing education, Administration and Nursing research.

I.IMPLICATION IN NURSING SERVICE:

Most of the nurse as women and complete professional have responsibility to promote health information and practice among mothers of ill children in the society. The health education regarding changing life style, treatment such as hemodialysis and kidney transplantation are to be made known to mothers of children undergoing hemodialysis.

News letter can be circulated and self instructional modules or Pamphlets can be issued regarding disease condition which includes treatment, side effects of the therapy and prevention of stress level of mothers of children with hemodialysis. Mass educational programme can be conducted in dialysis unit for mothers with children of hemodialysis regarding the disease, prognosis and the coping strategies using health education charts and pamphlets.

Nursing service department in the dialysis unit can have health education section with complete group of nurses to impart education on children with hemodialysis and various coping strategies can be taught to the parents using the pamphlets and involving family members during health education can be done.

II.IMPLICATION IN NURSING ADMINISTRATION:

Adequate nursing staffs can be posted in dialysis unit. Nursing personal working in the paediatric dialysis unit should update their children with hemodialysis .Nurses should develop skill in understanding the mothers body language and facial expressions .Nursing personnel can do incidental teaching where ever it is necessary.

Adequate staffs member to be appointed to assess the physical and psychological stress level of needs of the mothers of children with hemodialysis simultaneously .Hospital policy should be made to provide information to parents when a child is diagnosed as renal failure conducting service education programme for staff nurses, working in paediatric dialysis unit regarding hemodialysis.

III.IMPLICATION IN NURSING EDUCATION:

The nursing student should be able to identify the psychological needs and problems of mothers having children with chronic illness. They should be given special instruction for counselling of mothers.

Nursing students who are posted in paediatric dialysis unit are to be insisted to teach the mothers regarding the treatment and prognosis of illness.

IV. IMPLICATION IN NURSING RESEARCH:

There should be more scope for research in this area to identify the psychological problems faced by the mothers of children with hemodialysis. Instructional material can be developed to improve the knowledge on hemodialysis and prevent the stress level of mothers with children with hemodialysis. There is need for extensive research in this area regarding counseling and information programme for family member to cope up with chronic stress.

RECOMMENDATIONS

1. Similar study can be replicated in nursing with large sample in other hemodialysis unit.
2. A study can be conducted to find out the attitude of family members towards hemodialysis.
3. Experimental study can be conducted with standard teaching programme on knowledge of renal failure for mothers of hemodialysis children.
4. A comparative study can be conducted to find out similarities and difference in the stress and coping strategies of illiterate mothers of hemodialysis children.
5. A comparative study can be conducted to find out similarities and difference in the level of stress, and coping strategies of rural and urban mothers of hemodialysis children.
6. A comparative study can be done in assessing the stress level and coping strategies among working and non working mothers of hemodialysis children.
7. A comparative study on stress and coping strategies of parents having hemodialysis children with other chronic conditions such as mentally retarded and cerebral palsy.
8. A study can be undertaken to evaluate the role of health care providers in communicating with the parents having hemodialysis children.

REFERENCES

TEXT BOOKS

1. Afaf Ibrahim Melesia, Ph.D, (1995) **“THEORETICAL NURSING”**
3rd Edition, Lippincott Williams and Wilkins Company,
Philadelphia, 291-302.
2. Basavanthappa. B.T (2003) **“NURSING RESEARCH”** 1st Edition, Japee
Brothers, New Delhi: 15.
3. Denise F. Polit (2004) **“NURSING RESEARCH-PRINCIPLE AND
METHODS”** 7th Edition, Lippincott Company: 115-176.
4. Dorothy R, (1998) **“TEXT BOOK OF PEDIATRIC NURSING”** 6th
Edition, W.B. Saunders Company Asia: 1185-1193.
5. Du Gas (2002) **“INTRODUCTION TO PATIENT CARE”** 4th Edition,
Harcourt Private Limited, New Delhi: 322-325.
6. Elenar T. W. and Treece J. W. (1989) **“ESSENTIAL IN NURSING
RESEARCH”** 2nd Edition, Mosby, Philadelphia: 68-74.
7. Forfar and Arnell's (1992) **“TEXT BOOK OF PEDIATRICS”**
5th Edition, Churchill Livingstone, Philadelphia: 281

8. Flazouki et al (1999) **“TEXT BOOK OF PEDIATRICS”** 3rd Edition,
Lippincott:835-838.
9. Jacquenline Fawcett(1995)**”CONCEPTUAL MODELS OF NURSING”** 3rd
Edition,F.A Davis company,Philadelphia:31.
10. John W Best(1999) **“RESEARCH IN EDUCATION”** 7th Edition,
Asoka.K.Gtosh Publications ,New Delhi:69.
- 11 .James Mott,(1988) **“CHILD HEALTH NURSING”** 2rd Edition, Addison
Wesley Publishing Company,New York:962-964.
12. Keith W.Ashcraft (1990) **“PEDIATRIC UROLOGY”** 2nd Edition,
W.B Saunders Company:498.
13. Lippincott (1976) **“NURSING CARE OF CHILDREN”** 10th Edition,
Philadelphia,London: 935-946
14. Marilyn J.Hockenberry et al(2009) **“PEDIATRIC NURSING”** 8th Edition,
Mosby,Missouri:965-971.
15. Mary c. Townsend(2007) **“PSYCHIATRIC MENTAL HEALTH
NURSING”** 5th Edition, JP Publisher, New Delhi:4-9.

16.Nicki L, Potts (2002) **“PEDIATRICS NURSING”** 1st Edition, Delmar

Thomas Learning, Australia: 640-646.

17.Sr. Nancy(2009) **“PRINCIPLES AND PRACTICE OF NURSING”**

6th Edition, N.R Brothers, Indore: 610

18. Op Ghai et al **“ESSENTIAL PEDIATRICS”**7th Edition, CBS Publisier &

Distributer, New Delhi:459-467.

19.Patricia Ludder Jackson et al (2000) **“PRIMARY CARE OF THE**

CHILD CHRONIC CONDITION “ 3rd Edition, Mosby, London, 778-789.

20. Parul Datta (2007) **“PEDIATRIC NURSING”** 1st Edition

JP Publisier, New Delhi:363-369.

21.Potter &Perry (2004) **“BASIC NURSING”** 5th Edition, Elsevier, New Delhi

500-501.

22.Robert M. Kliegman (2007) **” ESSENTIAL PEDIATRICS”** 5th Edition

Elsevier, Missouri: 760-763.

23.Susan Rowen James et al (2009)-**“ NURSING CARE OF CHILDREN”**

3rd Edition, Elsevier, Missouri : 589-598.

24. Suraj Gupte(2004) **“THE SHROT TEXT BOOK OF PEDIATRICS”**

10th Edition, JP P ublisher, New Delhi, 435-439.

25. Sunder Rao P.S and Richard J.(1999) **“AN INTRODUCTION OF BIO STATISTICS”** 3rd Edition, New Delhi:78-79,101-103

JOURNAL

- 1.MC Donald SP, et al(2009)-**“Mode Of Dialysis TherapyAnd Mortality In EndStage Renal Disease”**, Journal Of AmericaSociety,Nephrology,20:155.
- 2.Johanson KL,(2009)-**“Survival And Hospitalization Among Children Using Nocturnal And Shrot Daily Commpared To Conventional Hemodialysis”** Journal of Kidney Institution,76:984.
3. Ensari (2007) “ **The Basic needs Of children on hemodialysis**” Oxfrod Journal
23 (4) : 1147-1148
- 4.Kawanish H et al(2007) –**“Clinical Effects Of Combined Therapy With Peritonal Dialysis and Hemodialyis “**,27(12),126.
- 5.Fadrowski s et al (2006)-**“ Changes In Physical and Psychosocial**

Functioning Among Adolescents With Chronic Kidney Disease,

Paediatric Nephrology 21(3):394-399.

6. Kantresy et al (2006) “**Timely transfer of peritoneal dialysis childrens to**

Hemodialysis improves Survival Rates”, Journal of Clinical

Nephrology, 65:43

7. Gold stein et al (2005) “ **Pediatric Patient with Multi Organ System Failure**

Receiving Continous Renal Replacement therapy” Journal of Kidney

Institution 671(2):653-658

8. Gearson A, et al (2004)-“**Anemia And Health Related Quality Of Life In**

Adolescent With chronic kidney disease” Journal

9. Vonesh. EF, (2004)-“**The Different Impact Of Risk Factors On Mortality In**

Hemodialysis And Peritoneal Dialysis”, Kidney Institution 66:2389

10. Baralatta GM (2003) “**Intra Operative Continuous Renal Replacement**

Therapy”, Journal of American Society of Nephrology, 623-624.

11. Eknoyan, et al (2002)-“**Effects Of Dialysis Dose And Membrane Flux In**

Maintenance hemodialysis” Journal of England 347:2010

12. Norrby U. et al (2001)-“**Realiability and valiticy of the Swedish version of**

child Health quesrionare” Journal Of Quality Of Research, 32(2):101-107.

13. Mok E, (2001)-**“Stressors and coping methods among chronic hemodialysis Patient in hong kong”**,Journal of clinical nursing ,10:503-511.
14. Welch J.L, et al(2001)**” Stressors ,Coping and depression in hemodialysis patients”**Journal Of Advanced Nursing,33:200-207.
15. Znojova M, et al (2001)-**“Evaluation of stress in dialyzed patients”**
Castek cesh 108-111.
16. Waters E,et al(2000) –**“Influence Of Parental Gender And Self-Reported Health And Illness On Parent-Reported Child Health,”**Journal
of Pediatrics 106(10):1422-8.
17. Foley,RN et al(1998)-**“Mode Of Dialysis Therapy And Mortality In End Stage Renal Disease”**, Journal Of American Society Nephrology 9:267.
18. Landgraf JM ,et al(1997)-**“Quality Of Life Research In Children: Methods And Instrument”**, Journal of Pediatric Urology,20:5-7
19. Wkurtin P,et al (1994)-**“Patient Based Health Status Measures In Pediatric Dialysis Expanding Outcome”**.Journal of American kidney

disease 24:376-382.

20. Metha RL., et al (1994) **“ A Randomized Clinical Trial of Continuous Intermittent Dialysis for Acute Renal Failure”** Journal of pediatric Nephrology, 7:703-707
21. Bunchmen et al, (1994), **“Vascular access for Hemodialysis in infants and Children”**, Journal of Nephrology, 10 (12) 628-630.
22. Dumlér F, et al (1992)-**“Clinical Experience With Short –Time Hemodialysis”** Journal of American kidney disease, 19:42.
23. Mehrotra et al (1991)-**“ A Multicentre Selection –Adjusted Comparison Of Children And Technique Survival On CAPD And Hemodialysis”**
Journal OF American Kidney Association, 54:289.
24. Dallas, (1989)-**“Introduction And Summary Proceeding Mortality And Morbidity Of Dialysis”**, Journal of American Kidney association
15:375.
25. Murphy. S. Power M et al (1985) **“Psychometric Evaluation Of Hemodialysis Stress Scale”**, Nursing Research, 34:368-371.

APPENDIX A

LETTER SEEKING PERMISSION TO CONDUCT THE STUDY

From

Ms. B.PADMINI

II year M.Sc. (Nsg),(Speciality-child Health Nursing),

Vivekanandha College of Nursing,

Trichengode.

To

The Medical Superintendent

Global hospital and HealthCity

Chennai .

Respected Sir/Madam,

Sub: MSc (Nursing) Degree Course- Conduct the Study for Project work in Global Hospital and Health City Chennai, Permission requested- Reg

I Ms. B.Padmini, II year M.Sc.(Nsg) student of Vivekanandha college of Nursing, Elayampalayam, Trichengode ., have under taken a project on **“A study to access the stress and coping strategies of mothers of children undergoing hemodialysis in a selected hospital”**.

OBJECTIVES OF THE STUDY:

1. To assess the knowledge of mothers on renal failure.
2. To assess the stress experience by mothers if children undergoing hemodialysis
3. To identify the coping strategies of mothers of children undergoing hemodialysis.
4. To compare the stress and coping strategies of mothers of children undergoing hemodialysis.
5. To determine the stress and coping strategies with selected demographic characteristics like age, education, occupation, religion, income, types of family

To achieve the above mentioned objectives I have prepared a structured rating scale. I humbly request you to give your valuable opinion and suggestion and kindly validate and certify the tool.

Thanking you

Yours faithfully,

Place: Tiruchengode

(PADMINI.B)

Date:

APPENDIX B

LETTER GRANTING PERMISSION TO CONDUCT THE STUDY

Date :

From :

The Medical Superintendent
Global hospital and HealthCity
Chennai .

To

Ms.B.Padmini,
II Year M.Sc.(Nursing) Student,
Vivekanandha College Of Nursing,
Elayampalyam,Tiruchengode.

Dear Student

Sub: Global hospital and Health City Chennai – permission granted to
conduct project work-Reg

Ref: Your requisition letter dated nil.

According to the letter cited in the reference,it has been informed that MS.B.Padmini . who is studying second year M.Sc.(Nursing) degree programme in Vivekanandha College of Nursing,Elyayampalyam is committed to conduct the study.Also she has been informed that she will not disturb the regular and routine works of the hospital and ward. I wish her all success.

-/Sd/-

The Medical Superintendent
Global hospital and HealthCity
Chennai .

Copy to : The Nursing Superintendent
Global hospital and HealthCity
Chennai

APPENDIX C

LETTER SEEKING PERMISSION FROM THE PARTICIPANTS

Dear Participants,

I am Ms.B.Padmini, M.Sc.(Nursing) Student, Vivekanandha College Of Nursing,Tiruchengode is interested to know about your stress and coping of Children undergoing hemodialysis. The information of yours will be kept confidential and will be used only for this study. Please participate in this interview schedule and state your willingness to participate in this study.

Thanking You

Yours Faithfully

(B.Padmini)

CONSENT FROM THE PARTICIPANT

I,..... Understand the purpose of this study and willing to participate in the Study

Signature

APPENDIX D

LETTER REQUESTING THE EXPERTS TO COMPLETE THE CONTENT

VALIDATION OF THE TOOL

From :

Ms.B.Padmini,
II Year M.Sc.(Nursing) Student,
Vivekanandha College Of Nursing,
Elayampalyam,Tiruchengode.

To

Respected Sir/Madam

Sub : M.Sc.Nursing programme – Thesis work – Content validation of the tool
requested – Reg.

I am Ms.B.Padmini, studying Second year M.Sc.Nursing degree course in Vivekanandha College of Nursing, Tiruchengode has taken a project on “ A study to access the stress and coping strategies of mothers of children undergoing hemodialysis in a selected hospitals” to be submitted to the Tamilnadu Dr.M.G.R.medical university as a partial requirement for master of Nursing Degree.

The Main Objectives of the study is

1. To assess the knowledge of mother of children with hemodialysis.
2. To assess the stress experience by mother if children with hemodialysis.
3. To identify the coping strategies adapted by mothers of children's with hemodialysis
4. To compare the stress and coping strategies of mother of children with hemodialysis
5. To determine the stress and coping strategies with selected demographic characteristics like age of the mothers, education, religion, occupation, family income, residence, types of the family adapted by mother of children with hemodialysis.

To achieve the above mentioned objectives ,I herewith enclose a structure scale for your kind perusal. I request you to kindly give your expert opinion and valuable suggestions for the same.

Thanking you

Yours Faithfully

(B.Padmini)

Encl:

1. Statement of the problem
2. Semi Structural interview Schedule
3. Structured rating scale.
4. Score Key.
5. Evaluation Criteria
6. Certificate of Validation.

APPENDIX- E

SECTION A

PART -I

DEMOGRAPHIC VARIABLES OF THE MOTHERS

1. Code no

2. Age of the mother

2.1) Below 25 yrs ()

2.2)26 yrs ()

2.3)31-35 yrs ()

2.4)Above 35 yrs ()

3.Education

3.1)Illiterate ()

3.2)primary education ()

3.3) Secondary education ()

3.4)Higher secondary school ()

3.5)Graduate ()

4.Religion

4.1)Hindu ()

4.2) Christion ()

4.3)Muslim ()

5.Occupation

5.1)Home maker ()

5.2) Skilled worker ()

5.3) Unskilled worker ()

5.4)professional ()

6. Family income

6.1)< Rs.2000/- ()

6.2)Rs.2000-3000/- ()

6.3)Rs.3000-4000/- ()

6.4)>Rs.4000/- ()

7.Residence

7.1)Rural aera ()

7.2)Urban aera ()

8.Types of family

8.1)Nuclear family ()

8.2)Joint family ()

DEMOGRAPHIC VARIABLES OF THE CHILD

1. Age

1.1)<6 YRS ()

1.2)6-12 YRS ()

1.3)12-14 YRS ()

1.4)14-17 YRS ()

1.5)17-19 YRS ()

2. Sex of the child

2.1) Male ()

2.2) Female ()

3. Birth order of the child

3.1) One ()

3.2) Two ()

3.3) Three ()

3.4)> Three ()

4. Birth history of the child

4.1) Full term baby ()

4.2) Pre term baby ()

5. Birth weight of the baby

5.1) Less than 2.5kg ()

5.2)2.6-3 kg ()

5.3) More than 3 kg ()

6. Immunization status of the child

6.1) Fully immunized ()

6.2) Partially immunized ()

6.3) Not immunized ()

7. Whether the child had any birth defect at birth

Yes ()

No ()

8. If yes mention—

9. Which age the child was diagnosed as having renal disease—

10. Frequency of dialysis for the child—

11. Any previous history of hospitalization

Yes ()

No ()

12. Any family history of renal disease

Yes ()

No ()

PART- II

STRESS RATING SCALE ON MOTHERS OF HEMODIALYSIS CHILDREN

S.NO	STATEMENT OF STRESS	NEVER	RARELY	FREQUENTLY	ALWAYS
A.	Measurement of physiological manifestation of stress				
1.	Do you feel that your sleep is distributed				
2.	Do you feel that your sweat profusely?				
3.	Do you experience dryness of mouth and throat often?				
4.	Do you have reduced appetite?				
5.	Do you have speech difficulties when you become anxious?				
B.	Psychosocial manifestation of stress				

6.	Do you feel guilty by the diagnosis of the child?				
7.	Do you find yourself becoming worried because of the diagnosis?				
8.	Do you find yourself get fear about the illness and side effects?				
9.	Do you lose interest in performing in your daily activities?				
10.	Do you get angry even for trivial matter?				
11.	Do you fear that other children might get the same illness?				
12.	Do you feel shy to participate in the parties with your child?				
13.	Do you find yourself disappointed in life because of child illness?				

14.	Do you find yourself with insufficient time to do things you really enjoy?				
15.	Do you feel that you have too many responsibilities in care activity of the child				
16.	Do you feel that cost of treatment of your child is expensive?				
17.	Do you feel that you feel that you are not able to do justice in playing the mother role to other children because of the involvement in the care activity of the ill child?				
18.	Do you feel that travelling to hospital for the follow- up is inconvenient?				
19.	Do you feel that child's education is affected because of illness?				

20.	Do you regret for having married?				
21.	Do you feel that your ambitions and desires about future is shattered?				
22.	Do you feel that it affect the economics status of the family?				
23.	Do you feel fear of rejection?				
24.	Do you get increases memory lapses?				
25.	Do you feel it affect the happiness of the family?				

SCORE:

Never - 1

Rarely - 2

Frequency - 3

Always - 4

SCORE :

1-25 : Normal

26-50 : Mild

51-75 : Moderate

76 -100 : Severe

PART-III

COPYING INVENTORY ADOPTED BY MOTHERS OF

HEMODIALYSIS CHILDREN

S.NO	STATEMENT OF COPING STRATIGIES	OFTEN	SOMETIMES	ONCE	RARELY
1	You go over the problem again and again in your mind, to try to understand it				
2	Accept it since nothing can be done				
3	Wish that you can change what has happened?				
4	Anticipate problem outcome and mentally release them				
5	Try to look on the bright side of the things				
6	Prepare yourself for worst to come				
7	Analyse the problem and solve it bit by bit				
8	Swallow analgesics or minor sedatives not on medical advice				

9	Try to make yourself feel better by drinking coffee frequently				
10	Try to feel better by eating				
11	Sleep more then usual				
12	Visit place of worship,Go on Pilgrimage and offer special offerings.				
13	Consult faith healer				
14	Consult and Astrologer				
15	Read religious book/prayer				
16	Practice medication/Relaxation Technique/Exercise/ Listening Music				
17	Seek reassurance and Emotional support from friend and related				
18	Attend counseling session				
19	Watch movie or other programs				
20	Spend time in the company of children				

21	Take up small jobs to meet the family crisis				
22	Keep feeling to yourself				
23	Irritate to family members				
24	Scold/ beat the children				
25	Blame other for the problem				

SCORE :-

1.Often - 1

2.Sometimes - 2

3.Once - 3

4. Rarely - 4

SCORE :-

1-25 : No coping.

26- 50 : Mild coping

51-75 : Moderate coping

76-100 : Adequate coping

APPENDIX - F
CERTIFICATE OF VALIDATION

This is to certify that the

Tool	:	Structured rating scale
Part I	:	Socio demographic profile
Part II	:	Stress rating scale on mothers of Hemodialysis children
Part III	:	Coping Inventory adopted by mothers of hemodialysis children

Prepared by Ms.B.Padmini,Second year M.Sc.,(Nursing) Student of Vivekanandha College of Nursing Concerning “**A study to access the stress and coping strategies of mothers of children undergoing hemodialysis in a selected hospital**”.has been validated by me.

Signature

Name

Designation

Date

